JVC

SERVICE MANUAL

COLOR TELEVISION

AV-36D501(A US)
AV-36D201(A US)

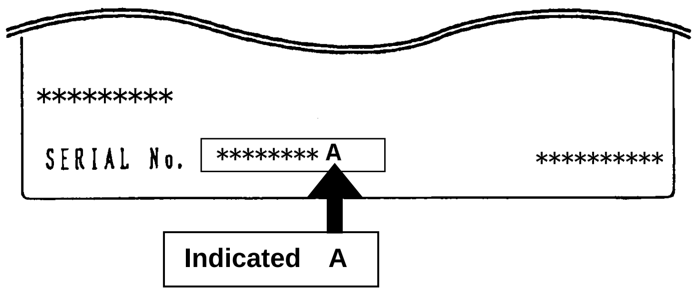
BASIC CHASSIS
GR2

Supplementary

The following item for the AV-36D501(A US), AV-36D201(A US) model were changed from those of the AV-36D501(US), AV-36D201(US) model.
Therefore, this service manual describes only the items which differ from those of the AV-36D501(US), AV-36D201(US) service manual.
For details other than those described in this manual, please refer to the AV-32D501(US), AV-32D201(US) service manual (No.51686, Jan. 2000).

■ MAIN IDENTIFICATION

While referring to the illustration given below, identify model name on the rating label affixed to the rear cover.



■ DIFFERENCE PARTS LIST

• **EXPLODED VIEW PARTS LIST (Page36)**

⚠	Ref. No.	Parts Number		Parts Name	Remarks
		AV-36D501(US) AV-36D201(US) (No.51687)	AV-36D501 (A US) AV-36D201 (A US) (No.51687B)		
⚠	V01	A90AEJ15X01	**A90AHH50X10/V/**	PICTURE TUBE	Not Interchangeable(Page36)
	101	LC20409-001B-A	**LC20409-001C-A**	DOOR	↑ (Page36)
		SGR-3003A-M2	**SGR-3004A-M2**	CRT SOCKET PWB	↑ (Page42)

No.51687B
Sep. 2000

● **MAIN PWB PARTS LIST (Page38-41)**

⚠	Ref. No.	Parts Number AV-36D501(US) (No.51687)	Parts Number AV-36D501(A US) (No.51687B)	Parts Name	Remarks
		SGR-1021A-M2	**SGR-1024A-M2**		
	R1423	NRSA02J-393X	**NRSA02J-473X**	CHIP RESISTER	Not Interchangeable
	R1425	————	**NRSA02J-334X**	M G RESISTER	Addition
	R1427	QRT029J-1R5	**QRT029J-2R2**	MF RESISTER	Not Interchangeable
	R1428	————	**QRE121J-220Y**	C R	Addition
	R1434	QRT029J-181	**QRL029J-221**	O M RESISTER	Not Interchangeable
	R1557	QRA14CF-3301Y	**NRZ0032-2941X**	MF RESISTER	↑
	R1732	NRSA02J-224X	**NRSA02J-474X**	CHIP RESISTER	↑
	C1431	QFLC1HJ-563Z	**QFLC2AJ-104Z**	M CAP.	↑
	C1435	NCB21HK-103X	**NCB21EK-683X**	CHIP C CAP.	↑
	L1531	CE41663-00B	**CE41029-00A**	LINIARITY	↑
	D1951	————	**MTZJ7.5A-T2**	ZENER DIODE	Addition

● **MAIN PWB PARTS LIST (Page38-41)**

⚠	Ref. No.	Parts Number AV-36D201(US) (No.51687)	Parts Number AV-36D201(A US) (No.51687B)	Parts Name	Remarks
		SGR-1021A-M2	**SGR-1024A-M2**		
	R1423	NRSA02J-393X	**NRSA02J-473X**	CHIP RESISTER	Not Interchangeable
	R1425	————	**NRSA02J-334X**	M G RESISTER	Addition
	R1427	QRT029J-1R5	**QRT029J-2R2**	MF RESISTER	Not Interchangeable
	R1428	————	**QRE121J-220Y**	C R	Addition
	R1434	QRT029J-181	**QRL029J-221**	O M RESISTER	Not Interchangeable
	R1557	QRA14CF-3301Y	**NRZ0032-2941X**	MF RESISTER	↑
	R1732	NRSA02J-224X	**NRSA02J-474X**	CHIP RESISTER	↑
	C1431	QFLC1HJ-563Z	**QFLC2AJ-104Z**	M CAP.	↑
	C1435	NCB21HK-103X	**NCB21EK-683X**	CHIP C CAP.	↑
	L1531	CE41663-00B	**CE41029-00A**	LINIARITY	↑
	D1951	————	**MTZJ7.5A-T2**	ZENER DIODE	Addition
⚠	RY1901	QSK0083-001	**QSK0084-001**	RELAY	Not Interchangeable
⚠	RY1921	QSK0083-001	**QSK0084-001**	RELAY	↑

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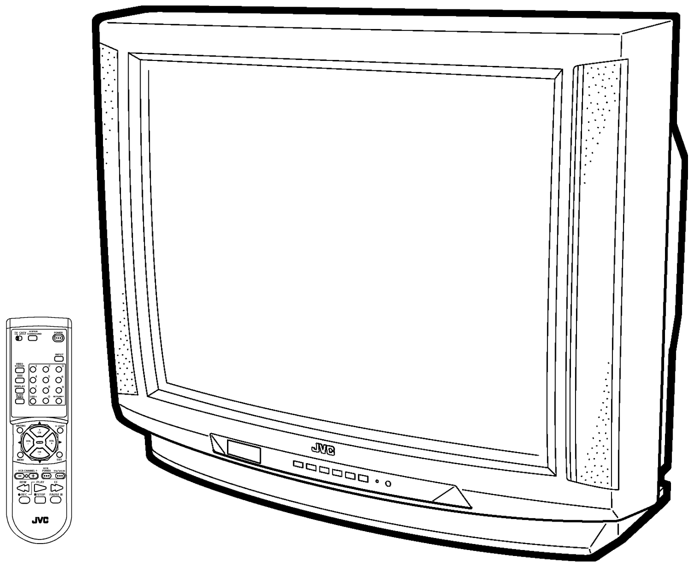
JVC

SERVICE MANUAL

COLOR TELEVISION

BASIC CHASSIS
GR2

AV-27D201(US&CA)
AV-32D201(US&CA)
AV-32D201(A US&A CA)



CONTENTS

No.51686
Jan. 2000

SPECIFICATIONS

Items	Contents	
	AV-27D201(US&CA)	**AV-32D201 (US&CA) AV-32D201 (A US&A CA)**
Dimensions (W × H × D)	29-5/8" × 23-1/4" × 19-1/2" 752mm × 590mm × 494mm	33-7/8" × 27" × 21-5/8" 859mm × 684mm × 548mm
Mass	78.1lbs / 35.5kg	114.4lbs / 52.0kg
TV System and Color system		
TV RF System	CCIR(M)	
Color System	NTSC	
Sound System	BTSC (Multi Channel Sound)	
TV Receiving Channels and Frequency		
VL Band	(02～06) 54MHz～88MHz	
VH Band	(07～13) 174MHz～216MHz	
UHF Band	(14～69) 470MHz～806MHz	
CATV Receiving Channels and Frequency		
Low Band	(02～06, A-8) by (02～06&01)	(54MHz～804MHz)
High Band	(07～13) by (07～13)	
Mid Band	(A～I) by (14～22)	
Super Band	(J～W) by (23～36)	
Hyper Band	(W+1～W+28) by (37～64)	
Ultra Band	(W+29～W+84) by (65～125)	
Sub Mid Band	(A8, A4～A1) by (01, 96～99)	
TV/CATV Total Channel	180 Channels	
Intermediate Frequency		
Video IF Carrier	45.75 MHz	
Sound IF Carrier	41.25 MHz (4.5MHz)	
Color Sub Carrier	3.58 MHz	
Power Input	120V AC, 60Hz	
Power Consumption	118W(US) / 1.7A(CA)	128W(US) / 1.8A(CA)
Picture Tube	27" (73cm) measured diagonally, Full Square	32" (80cm) measured diagonally, Full Square
High Voltage	29kV ± 1.3kV (at zero beam current)	31kV ± 1.3kV (at zero beam current)
Speaker	2" × 4-3/4" / 5 × 12cm, Oval type × 2	
Audio Power Output	5W+5W	
Video / Audio Input (1 / 2 / 3)	Video(1,2,3) : 1Vp-p 75Ω (RCA pin jack) Audio(1,2,3) : 500mVrms (-4dBs), High Impedance (RCA pin jack) S-Video (Input 1 Over) Y : 1Vp-p positive (negative sync provided, when terminated with 75Ω) C : 0.286Vp-p (burst signal, when terminated with 75Ω) Component Input (Input 2) Y : 1Vp-p positive (negative sync provided, when terminated with 75Ω) P_B/P_R : 0.7Vp-p 75Ω	
Audio Output (Variable / Fix : Selectable)	Variable : More then 0～1550mVrms (+6dBs) Low Impedance (1kHz when modulated 100%) (RCA pin jack) Fix : 500mVrms(-4dBs) Low Impedance (1kHz when modulated 100%) (RCA pin jack)	
AV Compu link EX Input	3.5mm mini jack	
Antenna terminal	75Ω (VHF/UHF) Terminal, F-Type Connector	
Remote Control Unit	RM-C383-1A (AA/R6/UM-3 battery × 2)	

Design & specifications are subject to change without notice.

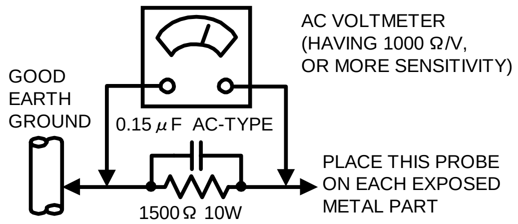
SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.
4. **Use isolation transformer when hot chassis.**
   The chassis and any sub-chassis contained in some products are connected to one side of the AC power line. An isolation transformer of adequate capacity should be inserted between the product and the AC power supply point while performing any service on some products when the HOT chassis is exposed.
5. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.
6. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).
7. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.
8. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.
9. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.
10. **Isolation Check**
    (Safety for Electrical Shock Hazard)
    After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 1100V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

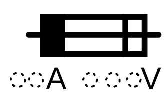
(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).

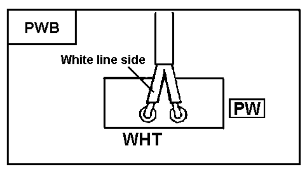


11. **High voltage hold down circuit check.**
    After repair of the high voltage hold down circuit, this circuit shall be checked to operate correctly.
    See item "**How to check the high voltage hold down circuit**".

This mark shows a fast operating fuse, the letters indicated below show the rating.



POWER CORD
REPLACEMENT WARNING.
Connecting the white line side of power cord to "WHT" character side.



FEATURES

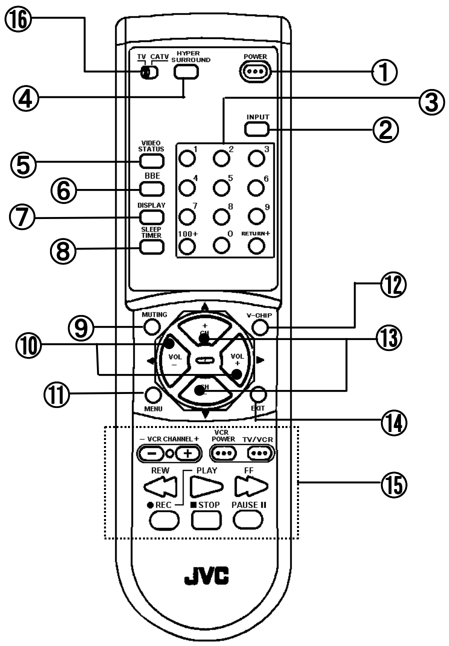
- New chassis design enables use of a main board with simplified circuitry.
- 2 LINE Digital Comb filter Improved picture quality.
- Full-square CRT reproduces fine textured picture in every detail.
- With AV COMPU LINK EX terminal.
- Closed-caption broadcasts can be viewed.
- With AUDIO. VIDEO INPUT terminal.
- S-VIDEO input terminal for taking best advantage of Super VHS.
- Variable / Fix audio output terminal.
- I^{2}C bus control utilizes single chip ICs.
- Because build in the BBE circuit improved the sound of conversation.
- DVD deck output can inputs to component video signal terminal.
- The hyper-surround system marks a reproduction of the acoustic effects in a theater with strong appeal.
- Built-in V-CHIP system.

OPERATING INSTRUCTIONS

For OPERATING INSTRUCTIONS use that of “00 GR2 IB” (No.51676).

■ FUNCTIONS

REMOTE CONTROL UNIT (RM-C383)

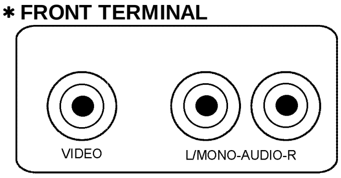


∗ **KEY ASSIGNMENT**

① POWERKEY	⑨MUTING KEY
② INPUT KEY	⑩VOLUME +/- KEY
③ CHANNEL KEY	⑪MENU KEY
④ HYPER SURROUND KEY	⑫V-CHIP KEY
⑤ VIDEO STATUS KEY	⑬CHANNEL +/- KEY
⑥ BBE KEY	⑭EXIT KEY
⑦ DISPLAY KEY	⑮VCR CONTROL KEY
⑧ SLEEP TIMER KEY	⑯TV/CATV SW KEY

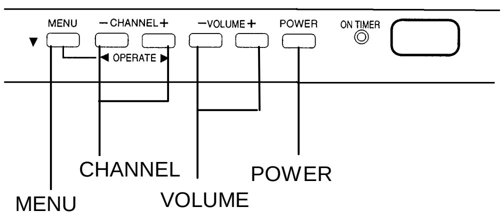
FRONT VIEW

∗ **FRONT TERMINAL**



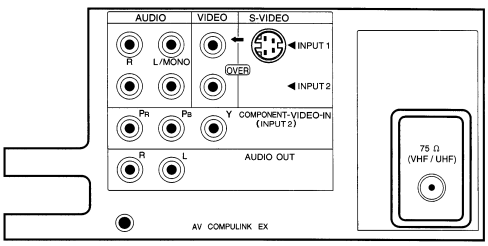
INPUT3 VIDEO/AUDIO TERMINAL

∗ **FRONT PANEL**



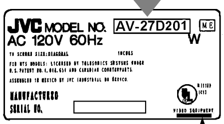
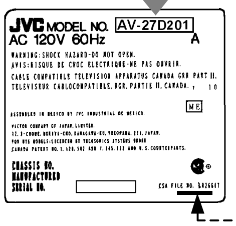
REAR VIEW

∗ **REAR PANEL**



HOW TO IDENTIFY MODELS

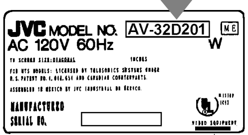
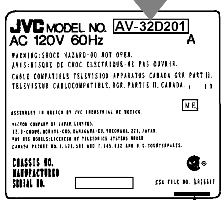
AV-27D201(US&CA)

⚠	MODEL / Parts name	AV-27D201(US)	AV-27D201(CA)
⚠	RATING LABEL	CM23034-001-A INDICATED AV-27D201  (INDICATED)	CM22999-A01-A INDICATED AV-27D201  (INDICATED)

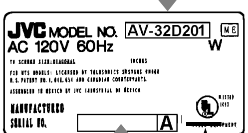
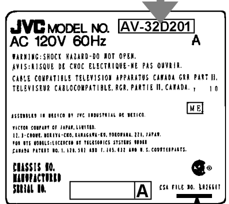
(US) and (CA) are different in SIZE.

AV-32D201(US&CA) / AV-32D201(A US&A CA)

- **For model AV-32D201 (A US&A CA), the suffix "A" is added to the serial number on the rating label.**
  (The difference between AV-32D201 (A US&A CA) and AV-32D201 (US&CA) is in the PICTURE TUBE. As the result of the difference in picture tube, the MAIN PWB also differ.)

⚠	MODEL / Parts name	AV-32D201(US)	AV-32D201(CA)
⚠	RATING LABEL	CM23034-001-A INDICATED AV-32D201  (INDICATED)	CM22999-A01-A INDICATED AV-32D201  (INDICATED)

(US) and (CA) are different in SIZE.

⚠	MODEL / Parts name	AV-32D201(A US)	AV-32D201(A CA)
⚠	RATING LABEL	CM23034-001-A INDICATED AV-32D201  INDICATED "A" (INDICATED)	CM22999-A01-A INDICATED AV-32D201  (INDICATED) INDICATED "A"

- (US) and (CA) are different in SIZE.

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVE THE REAR COVER

- Unplug the power cord plug.

1. Remove the **12** screws marked **A** as shown in Fig.2.
2. Remove the rear cover toward you.

∗ When reinstalling the rear cover, carefully push it inward after inserting the chassis into the rear cover groove.

REMOVING THE CHASSIS

- After removing the rear cover.

1. Slightly raise the both sides of the chassis by hand and remove the **2** claws under the both sides of the chassis from the front cabinet.
2. As shown in the Fig.2, withdraw the chassis backward along the rail in the arrow direction marked **B** .
   (If necessary, take off the wire clamp, connector's etc.)

∗ When conducting a check with power supplied, be sure to confirm that the CRT earth wire is connected to the CRT SOCKET PWB and the MAIN PWB.

REMOVING THE TERMINAL BOARD

- After removing the rear cover.

1. As shown in Fig.2, remove the **4** screws marked **C** .
2. As shown in Fig.1, after removing the claw marked **D** in the direction of arrow mark.
3. When you pull out the TERMINAL BOARD in the direction of arrow marked **E** as shown in Fig.1, it can be removed.
4. Thus the connector should be securely inserted when the TERMINAL BOARD is installed again.

REMOVING THE FRONT CONTROL PW BOARD

- After removing the rear cover and chassis.

1. As shown in Fig.2, remove the **3** screws marked **F** .
2. Then remove the FRONT CONTROL PWB.

REMOVING THE FRONT AV IN PW BOARD

- After removing the rear cover and chassis.

1. As shown in Fig.2, remove the **2** screws marked **G** .
2. Then remove the FRONT AV IN PWB.

REMOVING THE SPEAKER

- After removing the rear cover and chassis.

1. As shown in Fig.2, remove the **4** screws marked **H** .
2. Follow the same steps when removing the other hand speaker.

CHECKING THE MAIN PW BOARD

1. To check the backside of the MAIN PW Board.
   (1) Pull out the chassis. (Refer to REMOVING THE CHASSIS).
   (2) Erect the chassis vertically so that you can easily check the backside of the MAIN PW Board.

[CAUTION]

- When erecting the chassis, be careful so that there will be no contacting with other PWB.
- Before turning on power, make sure that the CRT earth wire and other connectors are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.

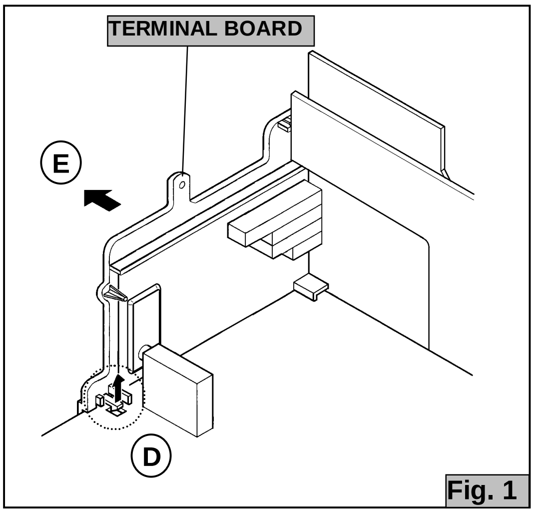


Fig. 1

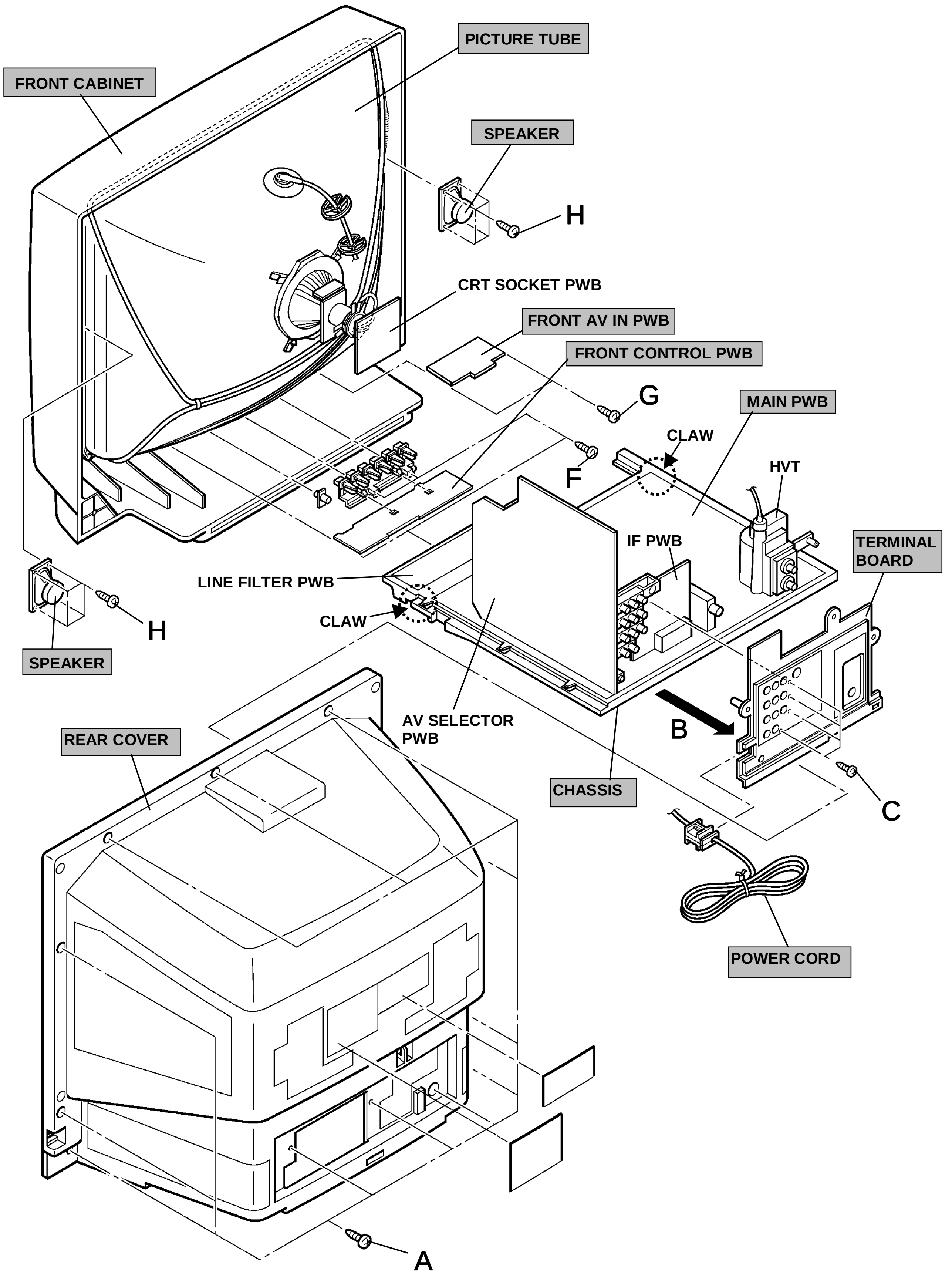

FRONT CABINET
PICTURE TUBE
SPEAKER
H
CRT SOCKET PWB
FRONT AV IN PWB
FRONT CONTROL PWB
G
MAIN PWB
CLAW
HVT
F
IF PWB
TERMINAL
BOARD
LINE FILTER PWB
CLAW
H
SPEAKER
AV SELECTOR
PWB
B
REAR COVER
CHASSIS
C
POWER CORD
A

Fig. 2

REMOVE THE CRT (PICTURE TUBE)

* ∗ Replacement of the CRT should be performed by 2 or more persons.
* After removing the rear cover, chassis etc.,

1. Putting the CRT change table on soft cloth, the CRT change table should also be covered with such soft cloth (shown in Fig.3).
2. While keeping the surface of CRT down, mount the TV set on the CRT change table balanced will as shown in Fig.4.
3. Remove 4 screws marked by arrows with a box type screwdriver as shown in Fig.4.

* Since the cabinet will drop when screws have been removed, be sure to support the cabinet with hands.

4. After 4 screws have been removed, put the cabinet slowly on cloth (At this time, be carefully so as not to damage the front surface of the cabinet) shown in Fig.5.

* The CRT should be assembled according to the opposite sequence of its dismounting steps.
* ∗ The CRT change table should preferably be smaller that the CRT surface, and its height be about 35cm.

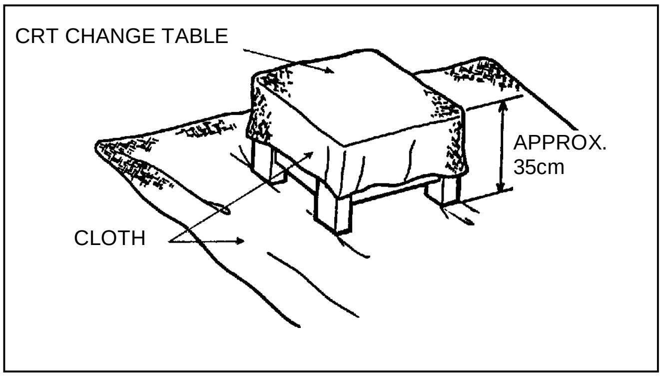


Fig. 3

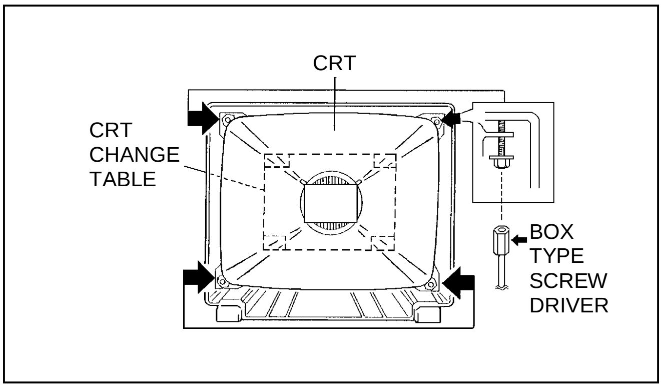


Fig. 4

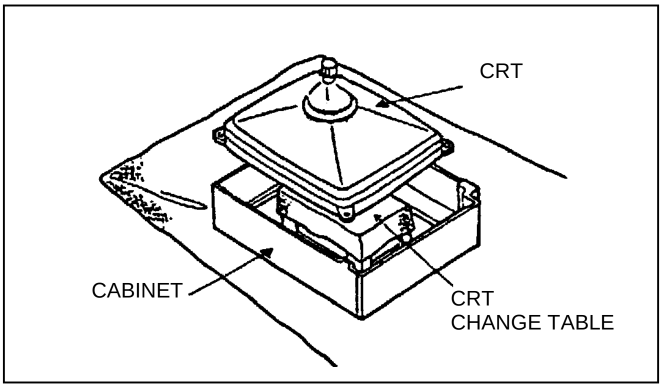


Fig. 5

COATING OF SILICON GREASE FOR ELECTRICAL INSULATION ON THE CRT ANODE CAP SECTION.

* Subsequent to replacement of the CRT and HV transformer or repair of the anode cap, etc. by dismounting them, be sure to coat silicon grease for electrical insulation as shown in Fig.6.
  Wipe around the anode button with clean and dry cloth. (Fig.6)
  Coat silicon grease on the section around the anode button. At this time, take care so that any silicon greases dose not sticks to the anode button. (Fig.7)

★ Silicon grease product No. KS - 650N

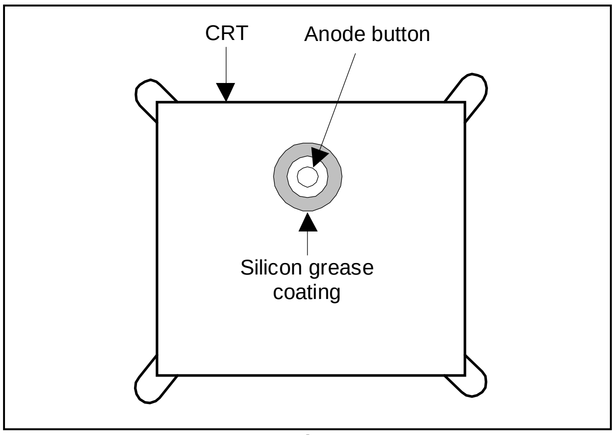


Fig. 6

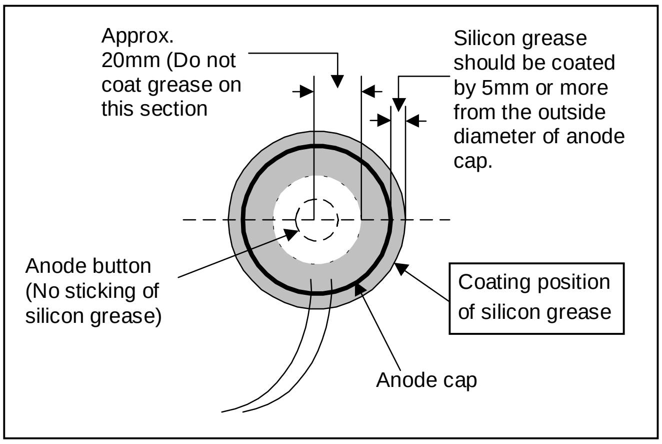


Fig. 7

REPLACEMENT OF CHIP COMPONENT

■ CAUTIONS

1. Avoid heating for more than 3 seconds.
2. Do not rub the electrodes and the resist parts of the pattern.
3. When removing a chip part, melt the solder adequately.
4. Do not reuse a chip part after removing it.

■ SOLDERING IRON

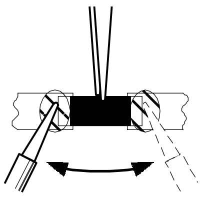
1. Use a high insulation soldering iron with a thin pointed end of it.
2. A 30w soldering iron is recommended for easily removing parts.

■ REPLACEMENT STEPS

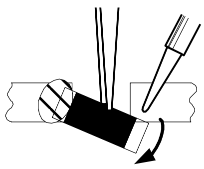
1. How to remove Chip parts

◆ Resistors, capacitors, etc

(1) As shown in the figure, push the part with tweezers and alternately melt the solder at each end.

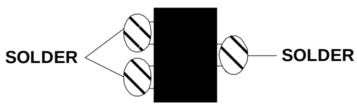


(2) Shift with tweezers and remove the chip part.

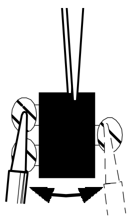


◆ Transistors, diodes, variable resistors, etc

(1) Apply extra solder to each lead.



(2) As shown in the figure, push the part with tweezers and alternately melt the solder at each lead. Shift and remove the chip part.

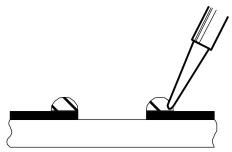


Note : After removing the part, remove remaining solder from the pattern.

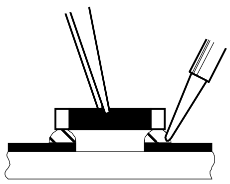
2. How to install Chip parts

◆ Resistors, capacitors, etc

(1) Apply solder to the pattern as indicated in the figure.

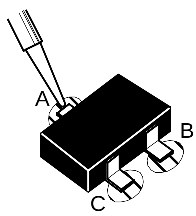


(2) Grasp the chip part with tweezers and place it on the solder. Then heat and melt the solder at both ends of the chip part.

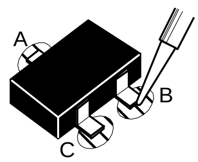


◆ Transistors, diodes, variable resistors, etc

(1) Apply solder to the pattern as indicated in the figure.
(2) Grasp the chip part with tweezers and place it on the solder.
(3) First solder lead **A** as indicated in the figure.



(4) Then solder leads **B** and **C**.



MEMORY IC REPLACEMENT

1. Memory IC

This model uses a memory IC.
This memory IC stores data for proper operation of the video and deflection circuits.
When replacing, be sure to use an IC written with the initial values of data.

2. Memory IC replacement procedure

<table>
<tr><th>Procedure</th><th>Screen display</th></tr>
<tr><td>

(1) Power off
Switch off the power and disconnect the power plug from the wall outlet.

</td><td></td></tr>
<tr><td>

(2) Replace the memory IC
Be sure to use memory ICs written with the initial data values.

</td><td></td></tr>
<tr><td>

(3) Power on
Connect the power plug into the wall outlet and switch on the power.

</td><td></td></tr>
<tr><td>

(4) System constant check and setting

☆It must not adjust without signal.

1) Press the **SLEEP TIMER** key and set **SLEEP TIMER** for 「0 min」.
2) Before disappear the display of SLEEP TIMER settings, simultaneously press the **DISPLAY** key and **VIDEO STATUS** key of the remote control unit.
3) The SERVICE MENU screen of Fig.1 will be displayed.
4) While the SERVICE MENU is displayed, again simultaneously press the **DISPLAY** and **VIDEO STATUS** keys to display the SYSTEM CONSTANT screen in Fig.2.
5) Refer to the SYSTEM CONSTANT table and check the setting items. If the value is different, select the setting item with the MENU UP/DOWN key and adjust the setting with the MENU LEFT/RIGHT keys. (The letters of the selected item are displayed in yellow.)
6) After adjusting, release the MENU LEFT/RIGHT key to store the setting value.
7) Press the EXIT key twice to return the normal screen.

</td><td rowspan="4">

SERVICE MENU (MAIN MENU)

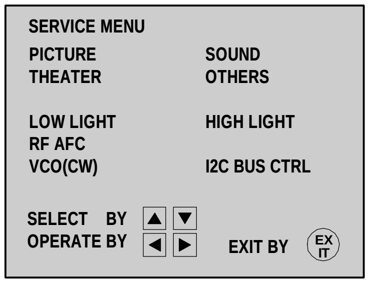


Fig.1

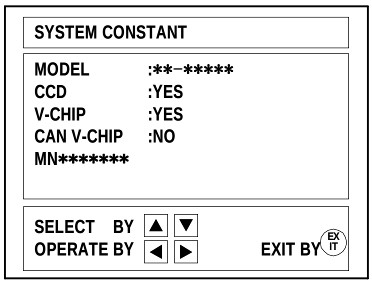


Fig.2

</td></tr>
<tr><td>

(5) Receive channel setting
Refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the receive channels (Channels Preset) as described.

</td></tr>
<tr><td>

(6) User settings
Check the user setting items according to Table 2.
Where these do not agree, refer to the OPERATING INSTRUCTIONS (USER'S GUIDE) and set the items as described.

</td></tr>
<tr><td>

(7) SERVICE MENU setting
Verify what to set in the SERVICE MENU, and set whatever is necessary (Fig.1).For setting, refer to the SERVICE ADJUSTMENT.

</td></tr>
</table>

TABLE 1 (System Constant setting)

Setting item	Setting constant	Setting value	
		AV-27D201(US&CA)	AV-32D201 (US&CA)/(A US&A CA)
MODEL	→ AV-27D501 → AV-32D501 → AV-36D501 → AV-27D201 → AV-32D201 → AV-36D201 →	AV-27D201	AV-32D201
CCD	→ YES → NO →	YES	←
V-CHIP	→ YES → NO →	YES	←
CAN V-CHIP	→ YES → NO →	NO	←

TABLE 2 (User setting)

Setting item	Setting value	Setting item	Setting value
1. Use remote controller keys			
POWER CHANNEL VOLUME INPUT HYPER SURROUND BBE	OFF CH-02 Proper sound volume TV OFF ON	DISPLAY VIDEO STATUS	OFF STANDARD
2. Settings of MENU			
PICTURE ADJUST TINT COLOR PICTURE BRIGHT DETAIL NOISE MUTING SET VIDEO STATUS	 CENTER CENTER CENTER CENTER CENTER ON ALL CENTER	**INITIAL SETUP** TV SPEAKER AUDIO OUT COMPONENT-IN LANGUAGE CLOSED CAPTION AUTO TUNER SET UP CHANNEL SUMMARY V-CHIP SET LOCK CODE	 ON FIX NO ENG CAPTION : CC1 TEXT : T1 TUNER MODE : AIR Unnecessary to set OFF SET US TV RATINGS : ALL CLEAR SET MOVIE RATINGS : ALL CLEAR UNRATED : VIEW Unnecessary to set
SOUND ADJUST BASS TREBLE BALANCE MTS	 CENTER CENTER CENTER STEREO		
CLOCK / TIMERS SET CLOCK ON/OFF TIMER	 Unnecessary to set NO		

SERVICE ADJUSTMENTS

BEFORE STARTING SERVICE ADJUSTMENT

1. **There are 2 ways of adjusting this TV: One is with the RREMOTE CONTROL UNIT and the other is the conventional method using adjustment part and components.**
2. **Adjustment with the remote control unit is made on the basis of the initial setting values, however, the new setting values which set the screen to its optimum condition may differ from the initial settings.**
3. Make sure that AC power is turned on correctly.
4. Turn on the power for the set and test equipment before use, and start the adjustment procedures after waiting at least 30 minutes.
5. Unless otherwise specified, prepare the most suitable reception or input signal for adjustment.
6. Never touch any adjustment parts, which are not specified in the list for this adjustment-variable resistors, transformers, condensers, etc.
7. Presetting before adjustment.
   Unless otherwise specified in the adjustment instructions, preset the following functions with the remote control unit.
   - **User mode setting position**

VIDEO STATUS	STANDARD
HYPER SURROUND	OFF
TINT, COLOR, PICTURE BRIGHT, DETAIL	CENTER
BASS, TREBLE, BALANCE	CENTER
AUDIO OUT	FIX

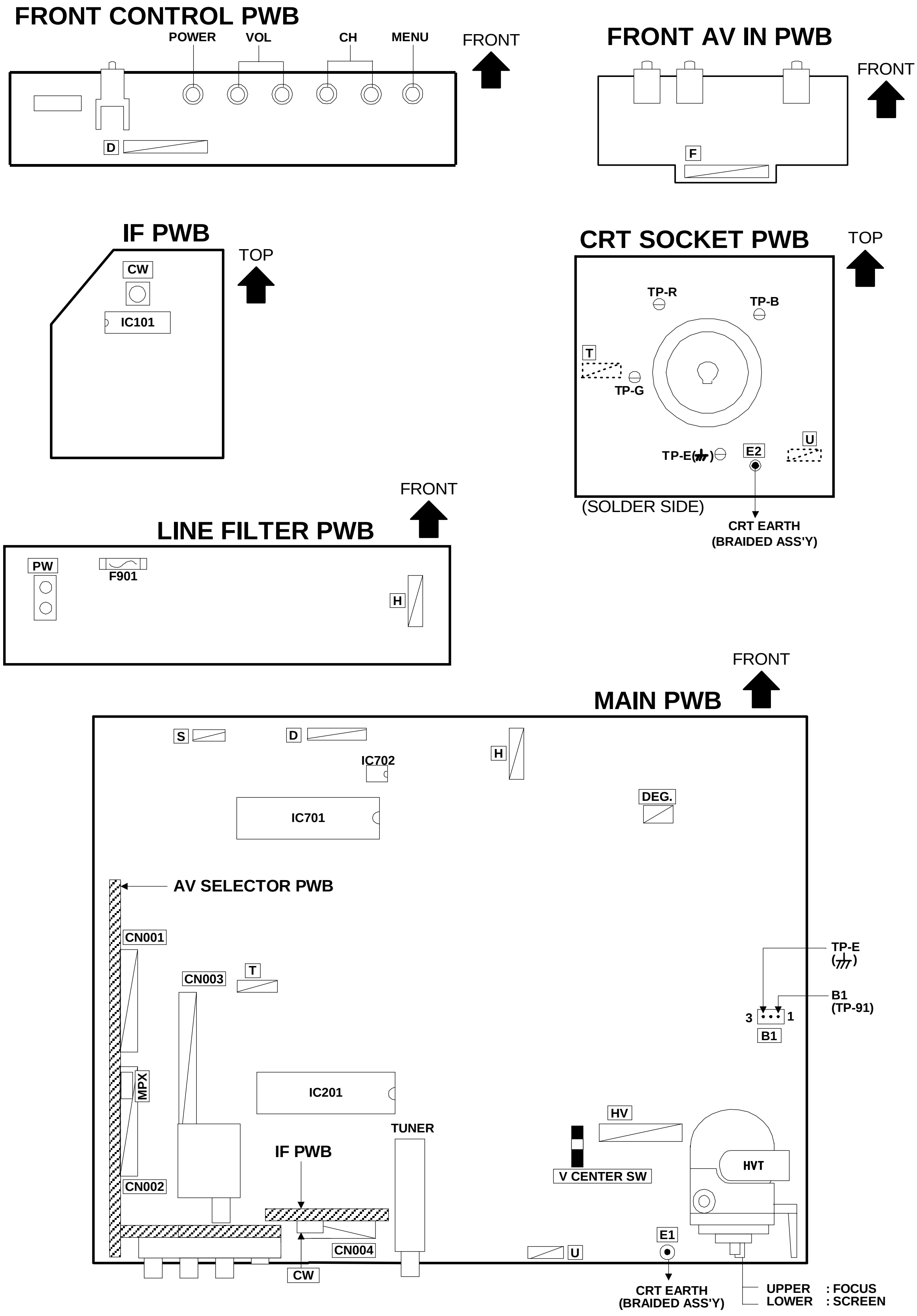
MEASURING INSTRUMENT

1. DC voltmeter(or digital voltmeter)
2. Oscilloscope
3. Signal generator (Pattern generator) [NTSC]
4. Remote control unit

ADJUSTMENT ITEMS

- Check of B1 POWER SUPPLY
- IF VCO adjustment
- RF AGC adjustment
- FOCUS adjustment
- DEFLECTION adjustment
  - V. CENTER, V. SIZE adjustment
  - H. POSITION, H SIZE, SIDE PIN adjustment
- VIDEO / CHROMA adjustment
  - WHITE BALANCE (Low light) adjustment
  - WHITE BALANCE (High light) adjustment
  - SUB BRIGHT adjustment
  - SUB CONTRAST adjustment
  - SUB COLOR adjustment
  - SUB TINT adjustment
  - DEMODULATION RATIO adjustment
- MTS circuit adjustment
  - INPUT LEVEL adjustment
  - STEREO VCO adjustment
  - SAP VCO adjustment
  - FILTER check
  - SEPARATION adjustment

ADJUSTMENT LOCATIONS



BASIC OPERATION OF SERVICE MENU

1. The adjustment using SERVICE MENU

The following adjustment items use the SERVICE MENU in the series of the adjustment. The adjustments are made on the basis of the initial setting values. The adjustment values which adjust the screen to the optimum condition can be different from the initial setting values. With the SERVICE NEMU, various settings can be made, and they are broadly classified in the following items of settings.

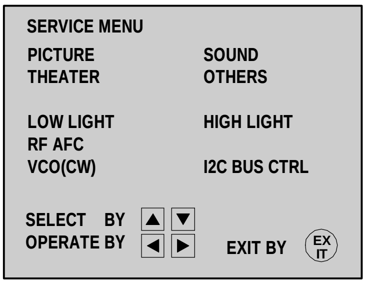
PICTURE ·················· Adjustment of the VIDEO/CHROMA and DEFLECTION circuits.
SOUND···················· Adjustment of the AUDIO circuit.
THEATER ················· Setting of the THEATER MODE screen.
OTHERS ·················· Setting of the screen that except the THEATER MODE.
LOW LIGHT ················ Adjustment of the WHITE BALANCE (Low light) circuit.
HIGH LIGHT ··············· Adjustment of the WHITE BALANCE (High light) circuit.
RF AFC ···················· Verification of the RF AFC adjustment. Because of it's no requirement on the service (**Do not adjust**).
VCO (CW) ················· Adjustment of the IF VCO circuit.
I^2C BUS CTRL ·············· Display and adjust the I^2C BUS CTRL condition, but it is no requirement on service. (**Do not adjust and fix on.)**

2. Key operation of the SERVICE MENU

[Enter to SERVICE MENU]

Press the **SLEEP TIMER** key and set the **SLEEP TIMER** for 「0 MIN」.
Then press the **DISPLAY** key and the **VIDEO STATUS** key of the remote control unit at the same time. Then enter the SERVICE MENU screen shown in figure.

SERVICE MENU (MAIN MENU)



[Exit form SERVICE MENU]

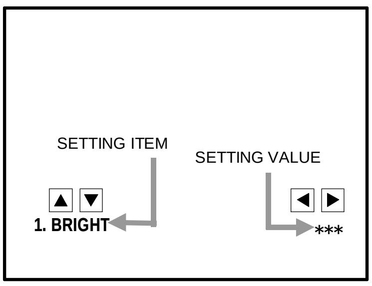
When complete the adjustment work, press the EXIT key to return to the main SERVICE MENU. And then press the EXIT key again, return to the normal screen.

[Select from main menu]

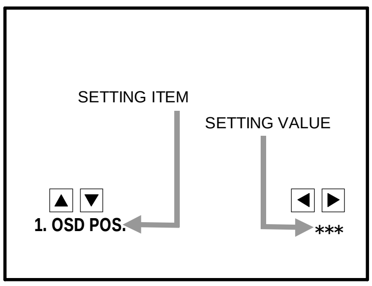
In main SERVICE MENU, press the UP or DOWN key on the remote control unit, to select any of the adjustment items.
The letters of the selected items are displayed in yellow.

[PICTURE, SOUND and OTHERS]

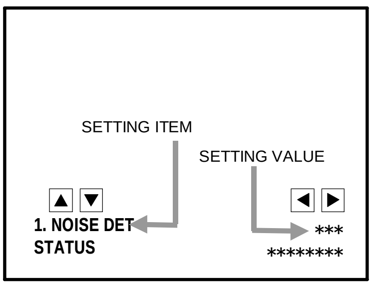
1) Select any of **PICTURE**, **SOUND** or **OTHERS** items, then press the LEFT or RIGHT key in main SERVICE MENU, the selectable screen will be displayed as shown in figure page later.
2) Then the UP or DOWN key is pressed, the **PICTURE** mode screen or the **SOUND** mode screen or the **OTHERS** mode screen is displayed, and their setting can be performed.



PICTURE MODE



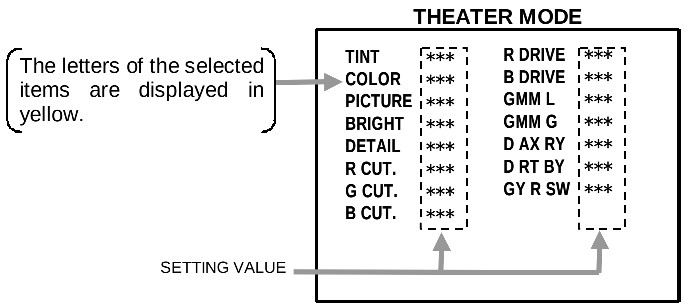
OTHERS MODE



SOUND MODE

[THEATER]

1) Select **THEATER** item, then press the LEFT or RIGHT key in main SERVICE MENU, the each screens will be displayed as shown in figure page later.
2) Then the settings or verifications can be performed.



THEATER MODE

[LOW LIGHT / HIGH LIGHT]

1) Select any of LOW LIGHT or HIGH LIGHT items, then press the LEFT or RIGHT key in main SERVICE MENU, the each screens will be displayed as shown in figure page later.
2) Then the settings or verifications can be performed.
3) The details of adjustments are described in the WHITE BALANCE page in ADJUSTMENT.

[RF AFC]

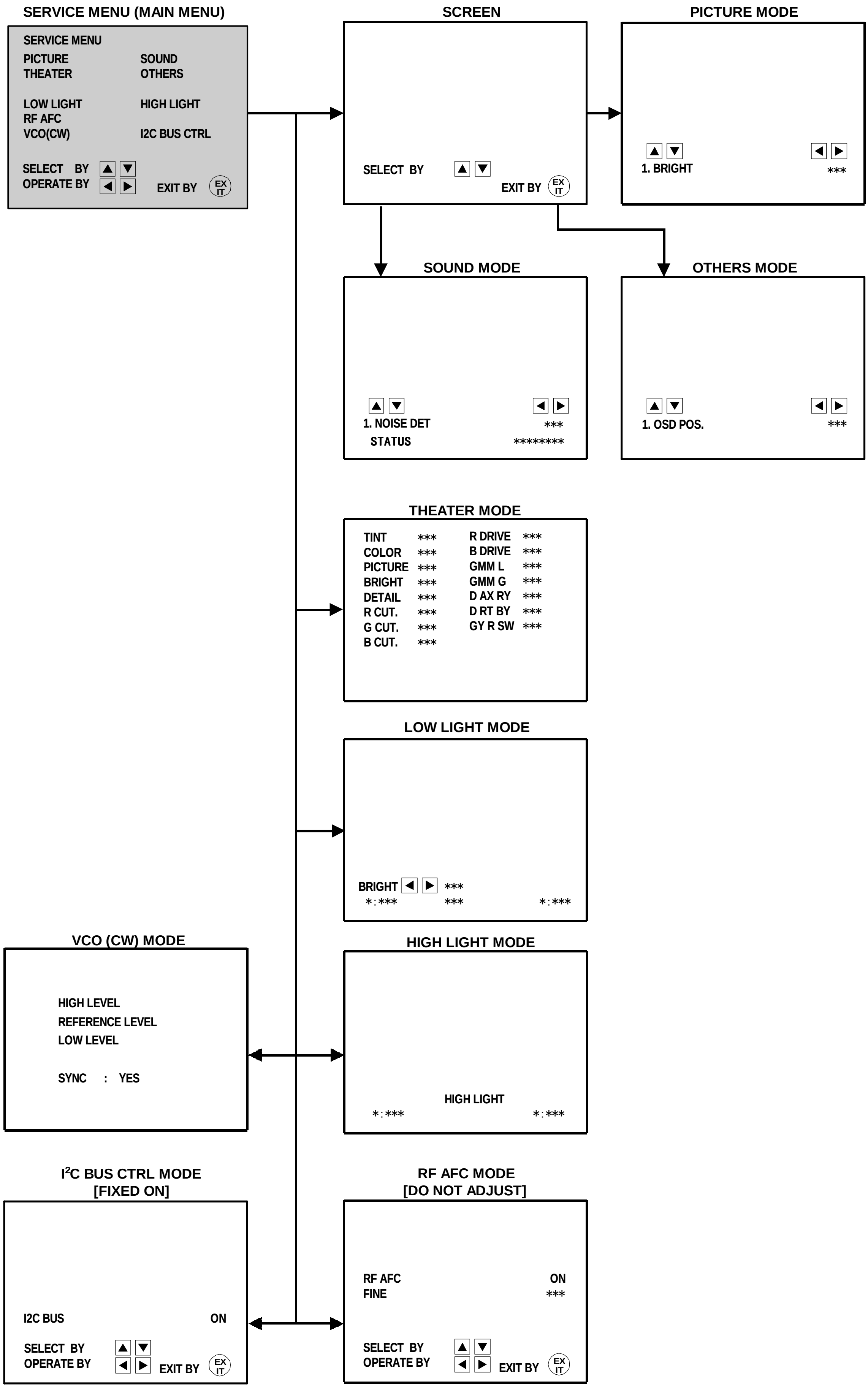
1) Select RF AFC item, then press the LEFT or RIGHT key in main SERVICE MENU, the each screens will be displayed as shown in figure page later.
2) Then the settings or verifications can be performed.

[VCO(CW)]

1) Select the **VCO(CW)** item, press the LEFT or RIGHT key in main SERVICE MENU, the screen will be displayed as shown in figure page later.
2) Then UP or DOWN key is pressed, the **VCO(CW)** mode screen is displayed, and the **VCO(CW)** setting can be performed.
3) The details of adjustments are described in the WHITE BALANCE page in ADJUSTMENT.

[Adjustment steps]

1) Select the setting item, and enter to its mode.
2) Adjust its values. When the key is released, the setting values will be stored (memorized).
3) Returns to the previous screen.


SERVICE MENU (MAIN MENU)
SERVICE MENU
PICTURE SOUND
THEATER OTHERS
LOW LIGHT HIGH LIGHT
RF AFC
VCO(CW) I2C BUS CTRL
SELECT BY
OPERATE BY
EXIT BY
EX IT
SCREEN
SELECT BY
EXIT BY
PICTURE MODE
1. BRIGHT ***
SOUND MODE
1. NOISE DET ***
STATUS ********
OTHERS MODE
1. OSD POS. ***
THEATER MODE
TINT *** R DRIVE ***
COLOR *** B DRIVE ***
PICTURE *** GMM L ***
BRIGHT *** GMM G ***
DETAIL *** D AX RY ***
R CUT. *** D RT BY ***
G CUT. *** GY R SW ***
B CUT. ***
LOW LIGHT MODE
BRIGHT ***
*:*** *** *:***
VCO (CW) MODE
HIGH LEVEL
REFERENCE LEVEL
LOW LEVEL
SYNC : YES
HIGH LIGHT MODE
HIGH LIGHT
*:*** *:***
I²C BUS CTRL MODE
[FIXED ON]
I2C BUS ON
SELECT BY
OPERATE BY
EXIT BY
RF AFC MODE
[DO NOT ADJUST]
RF AFC ON
FINE ***
SELECT BY
OPERATE BY
EXIT BY

INITIAL SETTING VALUE OF SERVICE MENU

1. **Adjustment of the SERVICE MENU is made on the basis of the initial setting values; however, the new setting values which set the screen in its optimum condition may differ from the initial setting.**
2. **Do not change the initial setting values of the setting (adjustment) items not listed in "ADJUSTMENT".**

No	Setting (Adjustment) item	Variable range	Initial setting value		
			AV-32D201 (US & CA)	AV-32D201 (A US & A CA)	AV-27D201 (US & CA)
1.	BRIGHT	0～255	127	127	127
2.	PICTURE	0～127	85	85	80
3.	COLOR	0～127	55	55	55
4.	TINT	0～127	70	70	70
5.	TV DETAIL	0～127	28	28	30
6.	EXT BRIGHT	±25	-1	-1	±0
7.	EXT PICT.	±25	±0	±0	±0
8.	EXT COLOR	±25	-4	-4	-3
9.	EXT TINT	±25	-4	-4	-4
10.	EXT DETAIL	0～127	30	30	30
11.	CMP BRIGHT	±25	-3	-3	-1
12.	CMP PICT.	±25	±0	±0	±0
13.	CMP COLOR	0～127	88	88	88
14.	CMP TINT	0～127	54	54	53
15.	CMP DETAIL	0～127	30	30	30
16.	TV APA DL	0 / 1	0	0	0
17.	EXT APA DL	0 / 1	0	0	0
18.	CMP APA DL	0 / 1	0	0	0
19.	DC TRAIN	0 / 1	1	1	1
20.	COLOR TRCK	0 / 1	0	0	0
21.	TV PR/OVR	0～7	7	7	7
22.	EXT PR/OVR	0～7	6	6	6
23.	CMP PR/OVR	0～7	6	6	6
24.	B ST GAIN	0～15	10	10	10
25.	W GMM LVL	0～15	4	4	4
26.	W GMM GAIN	0～15	5	5	5
27.	B ST SL PS	0～15	2	2	2
28.	W CHARA CR	0～15	3	3	3
29.	W CHARA SL	0～31	9	9	9
30.	DEMO AX RY	0～31	17	17	17
31.	DEMO RT BY	0～63	30	30	30
32.	GY RT SW	0～3	2	2	2
33.	CMP D AX R	0～31	12	12	12
34.	CMP D RT B	0～63	33	33	30
35.	CMP GY SW	0～3	2	2	2
36.	CMP R CUT	±50	-9	-9	-4
37.	CMP G CUT	±50	±0	±0	±0
38.	CMP B CUT	±50	-9	-9	-4
39.	CMP R DRV	±99	±0	±0	±0
40.	CMP B DRV	±99	±0	±0	±0

No	Setting (Adjustment) item	Variable range	Initial setting value		
			AV-32D201 (US & CA)	AV-32D201 (A US & A CA)	AV-27D201 (US & CA)
41.	V SIZE	0～127	33	33	47
42.	V S CR	0～63	15	15	20
43.	V LIN	0～63	50	50	50
44.	H POSI	0～63	11	11	13
45.	H SIZE	0～63	33	33	18
46.	SIDE PIN	0～63	28	28	25
47.	TRAPEZ	0～63	38	38	37
48.	EW COR TOP	0～125	1	1	2
49.	EW COR BTM	0～125	3	3	4
50.	BLK SW	0/1	0	0	0
51.	TV AFC1	0～3	2	2	2
52.	EXT AFC1	0～3	2	2	2
53.	CUT OFFSET	0～127	20	20	20
54.	DRV OFFSET	0～63	22	22	22
55.	AGC ADJ	0～127	65	65	65

- **SOUND MODE**

No	Setting (Adjustment) item	Variable range	Initial setting value	
			32 inch	27 inch
1.	NOISE DET.	0 / 1	1	1
2.	IN LEVEL	0～63	15	15
3.	FH MONITOR	0 / 1	0	0
4.	STEREO VCO	0～63	30	30
5.	PILOT CAN.	0 / 1	0	0
6.	FILTER	0～63	30	30
7.	LOW SEP.	0～63	28	28
8.	HI SEP.	0～63	25	25
9.	5FH MON.	0 / 1	0	0
10.	SAP VCO	0～63	27	27
11.	IN GAIN	0 / 1	0	0
12.	FIL. OFFSET	0～10	0	0
13.	BBE BASS	±15	-1	-1
14.	BBE TRE	±15	-1	-1

- **THEATER MODE**

No	Setting (Adjustment) item	Variable range	Initial setting value	
			32 inch	27 inch
1.	TINT	±20	-1	-1
2.	COLOR	±20	-6	-6
3.	PICTURE	±20	-21	-21
4.	BRIGHT	±20	-2	-2
5.	DETAIL	±15	-12	-12
6.	R CUT	±10	±0	±0
7.	G CUT	±10	±0	±0
8.	B CUT	±10	±0	±0
9.	R DRIVE	-99～+50	+43	+37
10.	B DRIVE	-99～+50	-56	-43
11.	GMM L	±15	±0	±0
12.	GMM G	±15	±0	±0
13.	D AX RY	±31	-10	-10
14.	D RT BY	±63	+7	+7
15.	GY RT SW	±3	-1	-1

● **OTHERS MODE**

No	Setting (Adjustment) item	Variable range	Initial setting value	
			32 inch	27 inch
1.	OSD POS.	0～7	2	2
2.	CCD POS.	0～15	3	3
3.	EOSEL	0 / 1	1	1
4.	MAIN 1M WT	0～15	0	0
5.	MENU COLOR	-30～0	-10	-10
6.	MENU PICT.	-30～0	-10	-10
7.	MENU BRI.	-30～0	-10	-10

● **LOW LIGHT MODE**

No	Setting (Adjustment) item	Variable range	Initial setting value All models
1.	R CUTOFF	(0～255)×4	80
2.	R CUT SW	0～3	1
3.	G CUTOFF	0～255	50
4.	B CUTOFF	(0～255)×4	80
5.	B CUT SW	0～3	1

● **HIGH LIGHT MODE**

No	Setting (Adjustment) item	Variable range	Initial setting value All models
1.	R DRIVE	(0～127)×4	80
2.	R DRV SW	0 / 1	0
3.	B DRIVE	(0～127)×2	80
4.	B DRV SW	0 / 1	0

● **RF AFC MODE**

Setting (Adjustment) item	Variable range	Initial setting value All models
RF AFC	ON/OFF	ON (DO NOT ADJUST)
FINE	-77～+77	±×× (DO NOT ADJUST)

● **I2C BUS CTRL MODE**

Setting (Adjustment) item	Variable range	Initial setting value All models
I2C BUS	ON/OFF	**[Fixed ON]**

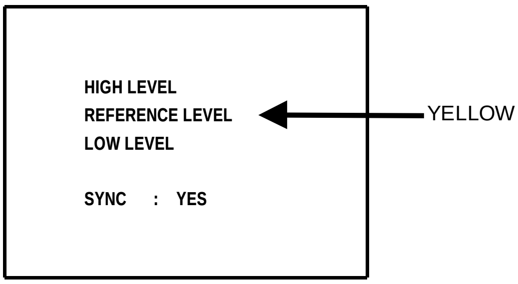
■ ADJUSTMENTS

B1 POWER SUPPLY

Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 POWER SUPPLY	**DC Voltmeter** **Signal generator**	**B1 (【B1】 Connector 【1】 pin) (TP-91)** **TP-E(⏚) (【B1】 Connector 【3】 pin)**		1. Input the black and white signal (color off). 2. Connect the DC voltmeter to【B1】connector【1】pin (TP-91) and TP-E(⏚) (B1 connector【3】pin). 3. Confirm that the voltage is DC134V±2V.

ADJUSTMENT OF IF. VCO

Item	Measuring instrument	Test point	Adjustment part	Description
IF VCO adjustment	**Remote control unit**		**CW TRANSF. [IF PWB]**	● Under normal conditions, no adjustment is required. And it must not adjust without signal. 1. Receive the NTSC broadcast. (Use channels without offset frequency). 2. Select the VCO (CW) mode from the SERVICE MENU. 3. Confirm that the color change from「HIGH LEVEL」to「LOW LEVEL」by CW transf., and check the「SYNC : YES」. 4. Adjust until「REFFERENCE LEVEL」mark turns yellow. And then confirm that the「SYNC : YES」again.



ADJUSTMENT OF RF AGC

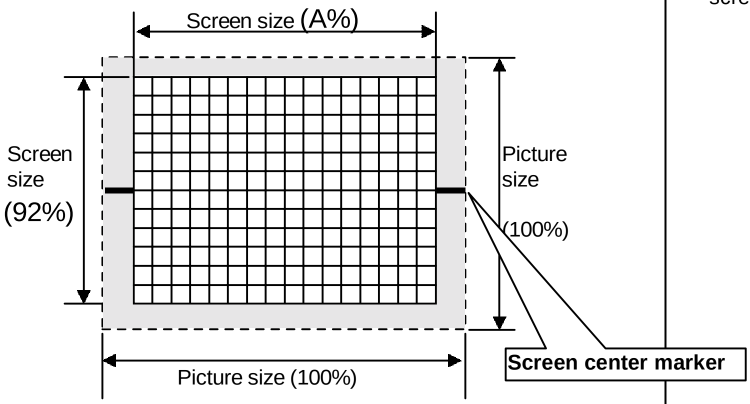
Item	Measuring instrument	Test point	Adjustment part	Description
RF. AGC adjustment	**Remote control unit**		**No.55 AGC ADJ**	1. Receive the broadcast. 2. Select **No.55 AGC ADJ** of the PICTURE MODE. 3. Press the MUTING key and turn off color. 4. With the MENU LEFT key, let down the value to appear the noise on the screen picture. 5. Then increase the value not to see the noise on the screen (at that time, not to increase the value too much). 6. Change to other channels and make sure that there is no irregularity. 7. Press the MUTING key and get color on.

ADJUSTMENT OF FOCUS

Item	Measuring instrument	Test point	Adjustment part	Description
FOCUS adjustment	**Signal generator**		**FOCUS VR [built-in HVT]**	1. Input the cross-hatch signal. 2. While looking at the screen, adjust the FOCUS VR to the vertical and horizontal lines will be clear and in fine detail. 3. Make sure that the picture is in focus even when the screen gets darkened.

ADJUSTMENT OF DEFLECTION CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
V. CENTER **V. SIZE** **adjustment**	**Signal generator** **Remote control unit**		**No.41 V SIZE** **V. CENTER SW** **[MAIN PWB]**	1. Input the cross-hatch signal. 2. Adjust the V.CENTER SW so that the horizontal line of the vertical center on the cross-hatch screen is agreement with the screen center marker. The screen center marker is positioned at both side of the vertical edge of vertical center. 3. Adjust the vertical screen size of the screen top to **92%** with the **No.41 V.SIZE** of the PICTURE SERVICE (Bottom of screen is to be located within the 85%～95% range).

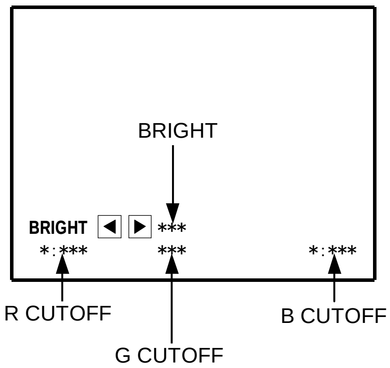


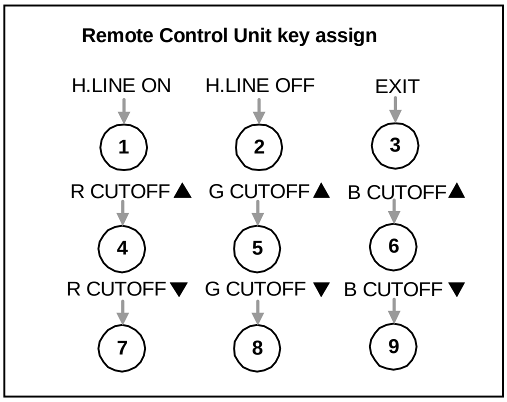
Item	Measuring instrument	Test point	Adjustment part	Description
H. POSITION **H. SIZE** **SIDE PIN** **adjustment**	**Signal generator** **Remote control unit**		**No.44 H POSITION** **No.45 H SIZE** **No.46 SIDE PIN**	1. Input the cross-hatch signal. 2. Adjust H. POSITION of left-right center with **No.44 H POSI**. 3. With **No.45 H SIZE**, adjust the screen horizontal size to **A%** as shown in the table bellow and figure above. 4. Adjust the vertical line to straight with **No.46 SIDE PIN**.

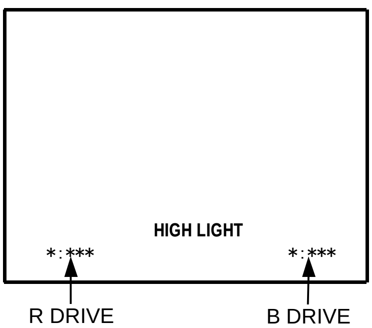
	A%
AV-27D201	90%
AV-32D201 / A	92%

ADJUSTMENT OF VIDEO / CHROMA CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
WHITE BALANCE (Low Light) adjustment	**Signal generator** **Remote control unit**		**R CUTOFF** **G CUTOFF** **B CUTOFF** **SCREEN VR**	1. Input the black and white signal (color off). 2. Select the [LOW LIGHT] MODE from the SERVICE MENU. 3. Set the initial setting value of “R CUTOFF”, “G CUTOFF” and “B CUTOFF” with the ④ to ⑨ keys of the remote control unit. 4. Display a single horizontal line by pressing the ① key of the remote control unit. 5. Turn the screen VR all the way to the left. 6. Turn the screen VR gradually to the right from the left until either one of the red, blue or green colors appears faintly. 7. Adjust the two colors of CUTOFF which did not appear until the single horizontal line that is displayed becomes white using the ④ to ⑨ keys of the remote control unit. 8. Turn the screen VR until the single horizontal line is displayed faintly. 9. Press the ② key to cancel the single horizontal line mode. ●The ③ EXIT key is the cancel key for the WHITE BALANCE.
WHITE BALANCE (High Light) adjustment	**Signal generator** **Remote control unit**		**G DRIVE** **B DRIVE**	1. Input the black-and-white signal (color off). 2. Select the [HIGH LIGHT] MODE in the SERVICE MENU. 3. Set the initial setting value of “R DRIVE” and “B DRIVE” with the ④, ⑥, ⑦and ⑨ keys of the remote control unit. 4. Adjust the screen until it becomes white using the ④, ⑥, ⑦ and ⑨ keys of the remote control unit. ●The ③ EXIT key is the cancel key for the WHITE BALANCE.



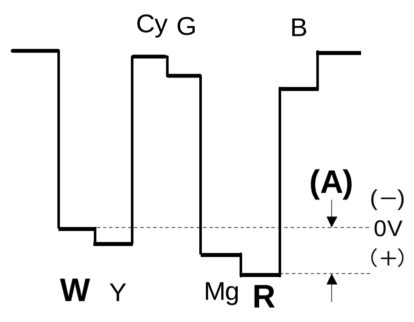




Remote Control Unit key assign

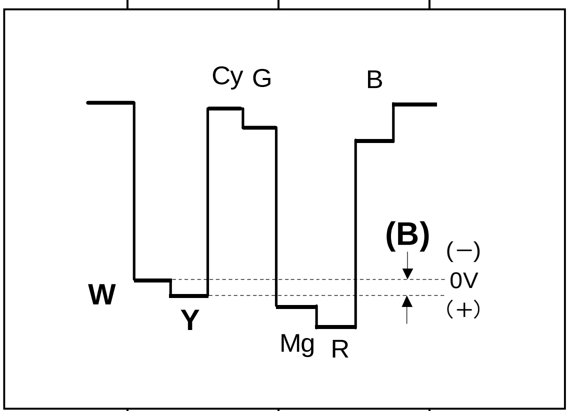
①key : H.LINE ON
②key : H.LINE OFF
③key : EXIT
④key : R DRIVE ▲
⑥key : B DRIVE ▲
⑦key : R DRIVE ▼
⑨key : B DRIVE ▼

Item	Measuring instrument	Test point	Adjustment part	Description
SUB CONTRAST adjustment	**Remote control unit**		**No.2 PICTURE**	**[Method of adjustment without measuring instrument]** 1. Receive the broadcast. 2. Select **No.2 PICTURE** of the PICTURE MODE. 3. Set the initial setting value of the **No.2 PICTURE** with the LEFT/RIGHT key of the MENU. 4. If the contrast is not the best with the initial setting value, make fine adjustment of the **No.2 PICTURE** until you get the optimum contrast.
SUB COLOR adjustment	**Remote control unit**		**No.3 COLOR**	1. Receive the broadcast. 2. Select **No.3 COLOR** of the PICTURE MODE. 3. Set the initial setting value of the **No.3 COLOR** with the LEFT/RIGHT key of the MENU. 4. If the color is not the best with the Initial setting value, make fine adjustment of the **No.3 COLOR** until you get the optimum color.
	Signal generator **Oscilloscope** **Remote control unit**	**TP-R** **TP-E(⏚)** **[CRT SOCKET PWB]**	**No.3 COLOR**	**[Method of adjustment using measuring instrument]** 1. Input the full field color bar signal (75% white). 2. Select **No.3 COLOR** of the PICTURE MODE. 3. Set the initial setting value of the **No.3 COLOR** with the LEFT/RIGHT key of the MENU. 4. Connect the oscilloscope between **TP-R** and **TP-E**. 5. Adjust COLOR and bring the value of **(A)** in the illustration to the voltage shown in the table bellow(V_{W-R}).



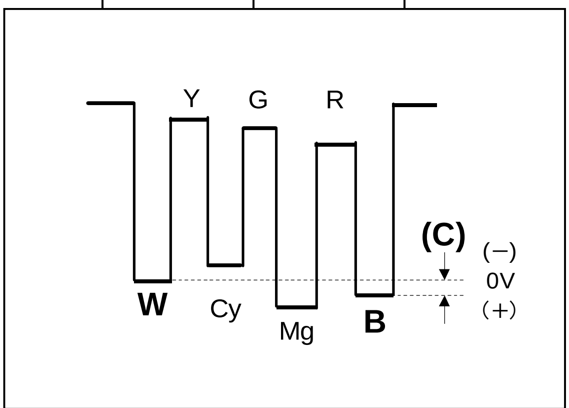
	Voltage between W-R
AV-27D201	**+32V**
AV-32D201 / A	**+40V**

Item	Measuring instrument	Test point	Adjustment part	Description
SUB TINT adjustment	**Remote control unit**		**No.4 TINT**	**[Method of adjustment without measuring instrument]** 1. Receive the broadcast. 2. Select **No.4 TINT** of the PICTURE MODE. 3. Set the initial setting value of the **No.4 TINT** with the LEFT/RIGHT key of the MENU. 4. If the tint is not the best with the initial setting value, make fine adjustment of the **No.4 TINT** until you get the optimum tint.
	Signal generator **Oscilloscope** **Remote control unit**	**TP-R** **TP-E(⏚)** **[CRT SOCKET PWB]**	**No.4 TINT**	**[Method of adjustment using measuring instrument]** 1. Input the full field color bar signal (75% white). 2. Select **No.4 TINT** of the PICTURE MODE. 3. Set the initial setting value of the **No.4 TINT** with the LEFT/RIGHT key of the MENU. 4. Connect the oscilloscope between **TP-R** and **TP-E**. 5. Adjust TINT and bring the value of **(B)** in the illustration to the voltage shown in the table bellow (V_{W-Y}).



	Voltage between W-Y
AV-27D201	**+18V**
AV-32D201 / A	**+20V**

Item	Measuring instrument	Test point	Adjustment part	Description
DEMODULA-TION RATIO adjustment	**Remote control unit**		**No.31 DEMO RT BY**	**[Method of adjustment without measuring instrument]** 1. Receive the broadcast. 2. Select **No.31 DEMO RT BY** of the PICTURE MODE. 3. Set the initial setting value of the **No.31 DEMO RT BY** with the LEFT/RIGHT key of the MENU. 4. If the blue color gain against the red color is not the best with the initial setting value, make fine adjustment of the **No.31 DEMO RT BY** until you get the optimum gain. ● DEMODULATION RATIO is the adjustment of the blue color demodulation gain against the red color.
	Signal generator **Oscilloscope** **Remote control unit**	**TP-B** **TP-E(⏚)** **[CRT SOCKET PWB]**	**No.31 DEMO RT BY**	**[Method of adjustment using measuring instrument]** 1. Input the full field color bar signal (75% white). 2. Select **No.31 DEMO RT BY** of the PICTURE MODE. 3. Set the initial setting value of the **No.31 DEMO RT BY** with the LEFT/RIGHT key of the MENU. 4. Connect the oscilloscope between **TP-B** and **TP-E**. 5. Adjust DEMODURATION RATIO and bring the value of **(C)** in the illustration to the voltage shown in the table bellow (V**W-B**).

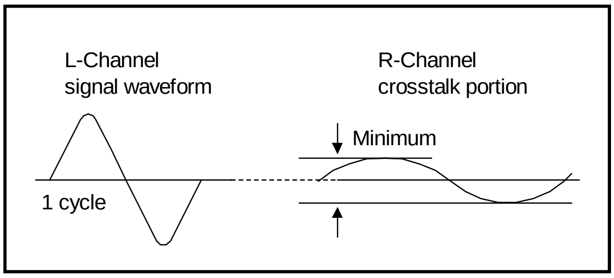


	Voltage between W-B
AV-27D201	**+14V**
AV-32D201 / A	**+18V**

ADJUSTMENT OF MTS CIRCUIT

Item	Measuring instrument	Test point	Adjustment part	Description
MTS INPUT LEVEL check	**Remote control unit**		**No.2 IN LEVEL**	1. Select the **No.2 IN LEVEL** of the SOUND MODE. 2. Verify that the **No.2 IN LEVEL** is set at its initial setting value.
MTS STEREO VCO adjustment	**Signal generator** **Frequency counter** **Remote control unit**	**R OUT [AUDIO OUT]**	**No.3 FH MONITOR** **No.4 STEREO VCO**	1. Input the RF signal (non-modulated sound signal) from the antenna terminal. 2. Select the **No.3 FH MONITOR** of SOUND MODE, and change the setting value from 0 to 1. 3. Connect the frequency counter to R out RCA pin of the AUDIO OUT. 4. Select the **No.4 STEREO VCO**. 5. Set the initial setting value of the **No.4 STEREO VCO** with the LEFT/RIGHT key of the menu. 6. Adjust the **No.4 STEREO VCO** so that the frequency counter will display 15.73kHz±0.1kHz. 7. Select the **No.3 FH MONITOR** of the SOUND MODE, and reset the setting value from 1 to 0.
MTS SAP VCO adjustment	**Signal generator** **Remote control unit**	**【MPX】 Connector 【4】 pin SDA 【3】 pin GND [AV SELECTOR PWB]** **R OUT [AUDIO OUT]**	**No.9 5FH MON.** **No.10 SAP VCO**	1. Receive the RF signal (non-modulated sound signal) from the antenna terminal. 2. Connect between pin【4】of【MPX】connector and GND (Pin【3】of【MPX】connector) through 1MΩ resistor. 3. Select the **No.9 5FH MON**. of the SOUND MODE, and reset the setting value from 0 to 1. 4. Connect the frequency counter to R out RCA pin of the AUDIO OUT. 5. Select the **No.10 SAP VCO**. 6. Set the initial setting value of **No.10 SAP VCO** with the LEFT/RIGHT key of the menu. 7. Adjust the **No.10 SAP VCO** so that the frequency counter will display 78.67kHz±0.5kHz. 8. Select the **No.9 5FH MON.** of the SOUND MODE, and reset the setting value from 1 to 0.
MTS FILTER check	**Remote control unit**		**No.6 FILTER**	1. Select the **No.6 FILTER** of the SOUND MODE. 2. Verify that the **No.6 FILTER** is set at its initial setting value.

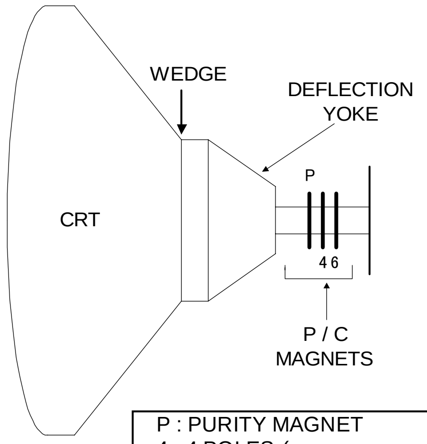
Item	Measuring instrument	Test point	Adjustment part	Description
MTS SEPARATION adjustment	**TV audio multiplex signal generator** **Oscilloscope** **Remote control unit**	**L OUT** **R OUT** **[AUDIO OUT]**	**No.7 LOW SEP.** **No.8 HI SEP.**	1. Input the stereo L signal (300Hz) from the TV audio multiplex signal generator to the antenna terminal. 2. Connect an oscilloscope to L OUT pin of the AUDIO OUT, and display one cycle portion of the 300Hz signal. 3. Change the connection of the oscilloscope to R OUT pin of the AUDIO OUT, and enlarge the voltage axis. 4. Select the **No.7 LOW SEP.** of the SOUND MODE. 5. Set the initial setting value of the **No.7 LOW SEP.** with the LEFT/RIGHT key of the menu. 6. Adjust the **No.7 LOW SEP.** so that the stroke element of the 300Hz signal will become minimum. 7. Change the signal to 3kHz, and similarly adjust the **No.8 HI SEP.**



PURITY, CONVERGENCE

PURITY ADJUSTMENT

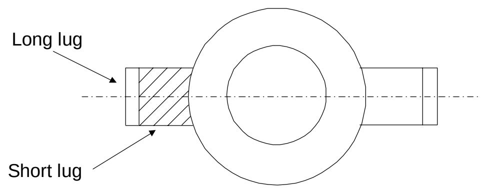
1. Demagnetize CRT with the demagnetizer.
2. Loosen the retainer screw of the deflection yoke.
3. Remove the wedges.
4. Input a green raster signal from the signal generator, and turn the screen to green raster.
5. Move the deflection yoke backward.
6. Bring the long lug of the purity magnets on the short lug and position them horizontally. (Fig.2)
7. Adjust the gap between two lugs so that the GREEN RASTER will come into the center of the screen. (Fig.3)
8. Move the deflection yoke forward, and fix the position of the deflection yoke so that the whole screen will become green.
9. Insert the wedge to the top side of the deflection yoke so that it will not move.
10. Input a crosshatch signal.
11. Verify that the screen is horizontal.
12. Input red and blue raster signals, and make sure that purity is properly adjusted.



• **P/C MAGNETS**

P : PURITY MAGNET
4 : 4 POLES (convergence magnets)
6 : 6 POLES (convergence magnets)

Fig.1



Bring the long lug over the short lug and position them horizontally.

Fig.2

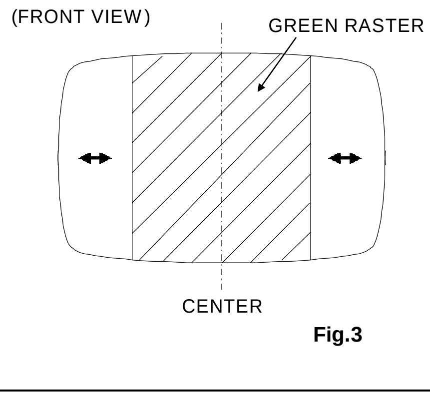


Fig.3

STATIC CONVERGENCE ADJUSTMENT

1. Input a crosshatch signal.
2. Using 4-pole convergence magnets, overlap the red and blue lines in the center of the screen (Fig.1) and turn them to magenta (red/blue).
3. Using 6-pole convergence magnets, overlap the magenta (red/blue) and green lines in the center of the screen and turn them to white.
4. Repeat 2 and 3 above, and make best convergence.

DYNAMIC CONVERGENCE ADJUSTMENT

1. Move the deflection yoke up and down and overlap the lines in the periphery. (Fig. 2)
2. Move the deflection yoke left to right and overlap the lines in the periphery. (Fig. 3)
3. Repeat 1 and 2 above, and make best convergence.

- After adjustment, fix the wedge at the original position.
  Fasten the retainer screw of the deflection yoke.
  Fix the 6 magnets with glue.

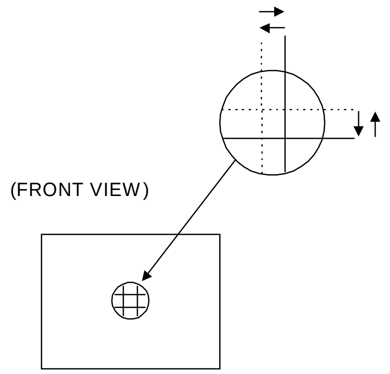


Fig.1

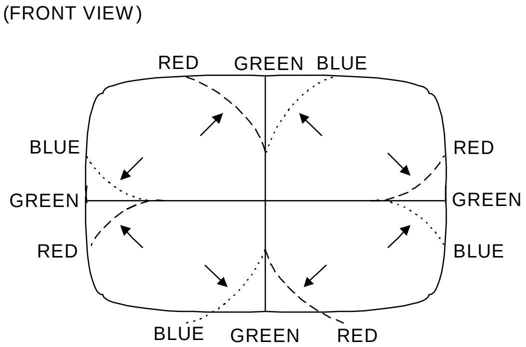


Fig.2

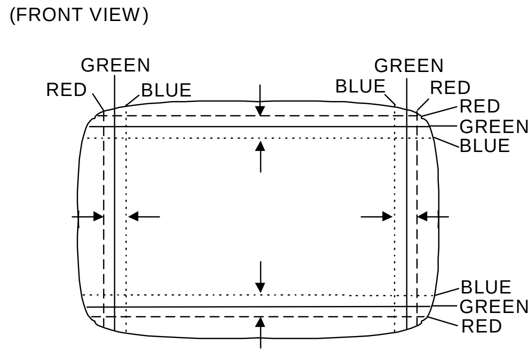


Fig.3

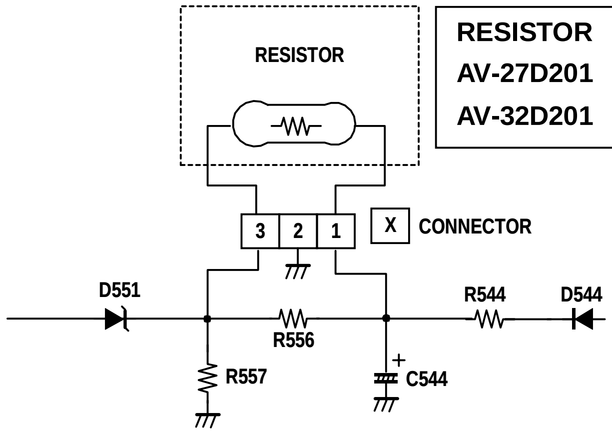
HOW TO CHECK THE HIGH VOLTAGE HOLD DOWN CIRCUIT

1. HIGH VOLTAGE HOLD DOWN CIRCUIT

After repairing the high voltage hold down circuit.
This circuit shall be checked to operate correctly.

2. CHECKING OF THE HIGH VOLTAGE HOLD DOWN CIRCUIT

(1) Turn the power sw ON.
(2) As shown in figure bellow, set the resistor (between 【X】 connector 【1】 & 【3】).
(3) Make sure that the screen picture disappears.
(4) Temporarily unplug the power cord.
(5) Remove the resistor (between 【X】 connector 【1】 & 【3】).
(6) Again plug the power cord, make sure that the normal picture is displayed on the screen.



RESISTOR

AV-27D201	**: 15.8kΩ ±1%**	**1/4W**
AV-32D201	**: 16.2kΩ ±1%**	**1/4W**

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% 0%

CONTENTS

USING CRT, P.W. BOARD & REMOTE CONTROL UNIT

Model / P.W.B ASS'Y	Ⅰ	Ⅱ	Ⅲ
	AV-27D201(US&CA)	**AV-32D201 (US&CA)**	**AV-32D201 (A US&A CA)**
CRT (ITC TUBE)	A68AEG25X01	A80LJF30X08(G)	M80JUA061X06
MAIN PWB	SGR-1014A-M2	SGR-1016A-M2	SGR-1017A-M2
CRT SOCKET PWB	SGR-3003A-M2	←	←
FRONT CONTROL PWB	SGR-4003A-M2	←	←
AV SELECTOR PWB	SGR-8004A-M2	←	←
FRONT AV IN PWB	SGR-8301A-M2	←	←
LINE FILTER PWB	SGR-9001A-M2	SGR-9002A-M2	←
IF PWB	SGR0F002A-M2	←	←
REMOTE CONTROL UNIT	RM-C383-1A	←	←

Ⅰ. AV-27D201(US&CA)

EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	A68AEG25X01	ITC TUBE(C)	Inc.DY,PC,WED.
⚠	L01	CE41329-00DJB	DEGAUSSING COIL	
⚠	T1522	QQH0051-001	HVT	
⚠	1	LC10276-003C-A	FRONT CABINET	
	2	CHGB0015-0B	BRAIDED WIRE	
	3	CHGB0016-0C	SUB BRAIDED WIRE	
⚠	4	CEBSS12D-04KJ2	SPEAKER	(×2)SP01,SP02
⚠	5	LC10363-001D-A	CHASSIS BASE	
⚠	6	LC10364-001C-A	TERMINAL BOARD	
	7	QYSBSB3010Z	TAPPING SCREW	(×4)
⚠	8	QMPD200-200-JC	POWER CORD	Within LINE FILTER PWB
⚠	9	LC20106-001C-A	CORD CLAMP	
⚠	10	LC10277-001G-A	REAR COVER	
	11	QYSBSFG4016Z	TAPPING SCREW	(×12)
⚠	13	CM23034-001-A	RATING LABEL	AV-27D201(US)
⚠	13	CM22999-A01-A	RATING LABEL	AV-27D201(CA)
	15	LC30191-002A-A	REMOCON LENS	
	16	CM48006-006-C	JVC MARK	
	17	LC20217-001B-A	CONTROL KNOB	
	18	LC20409-001C-A	DOOR	
	19	CM48229-00A	DOOR LATCH	

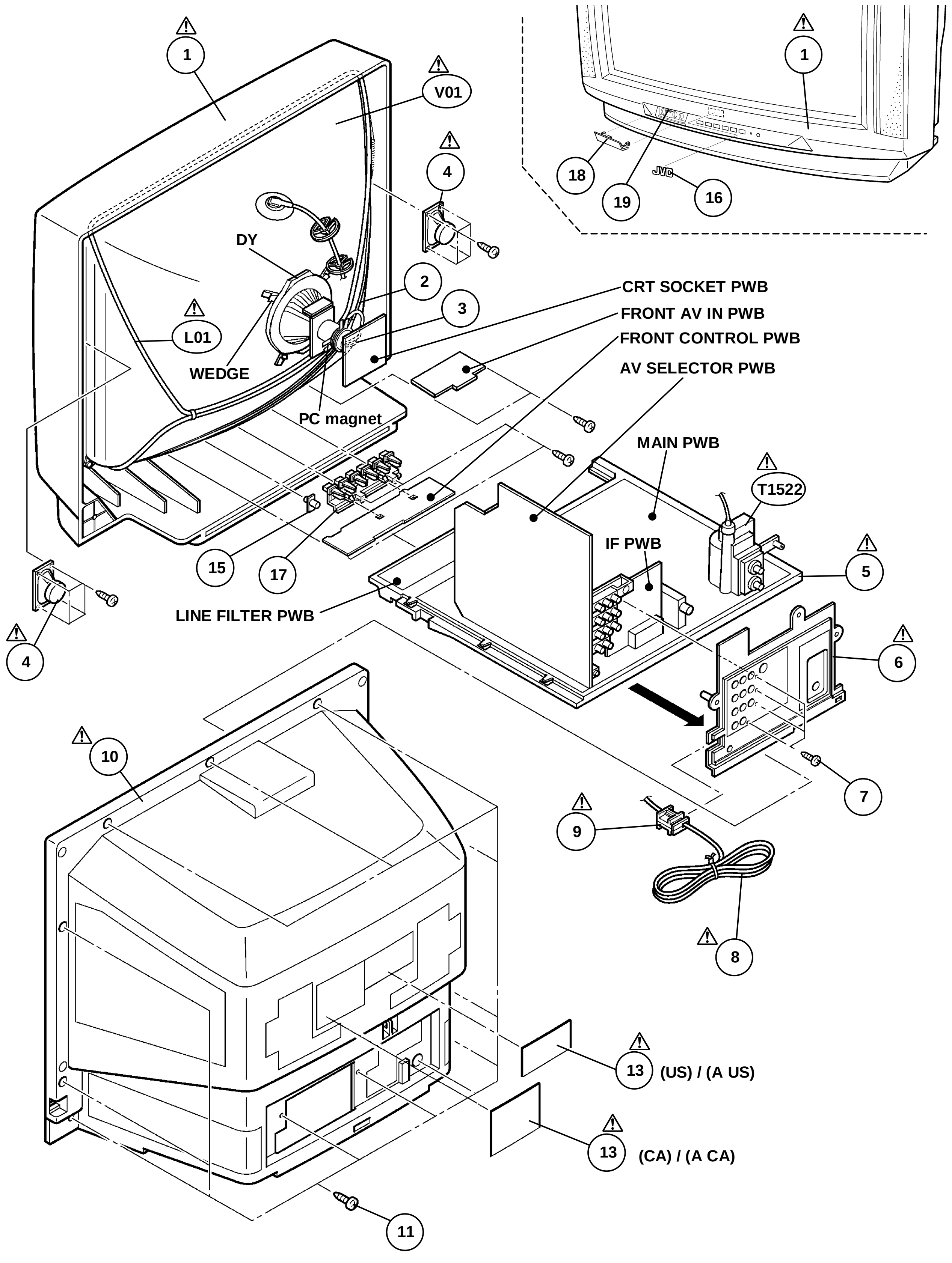
Ⅱ. AV-32D201(US&CA) / Ⅲ. AV-32D201(A US & A CA)

EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description
⚠	V01	A80LJF30X08(G)	ITC TUBE(C)	Inc.DY,PC,WED. AV-32D201(US) / AV-32D201(CA)
⚠	V01	M80JUA061X06	PICTURE TUBE(C)	Inc.DY,PC,WED. AV-32D201(A US) / AV-32D201(A CA)
⚠	L01	CELD066-002JA	DEGAUSSING COIL	
⚠	T1522	QQH0051-001	HVT	
⚠	1	LC10307-003C-A	FRONT CABINET	
	2	CHGB0015-0E	BRAIDED WIRE	
	3	CHGB0016-0D	SUB BRAIDED WIRE	
⚠	4	CEBSS12D-04KJ2	SPEAKER	(×2)SP01,SP02
⚠	5	LC10363-001D-A	CHASSIS BASE	
⚠	6	LC10364-003A-A	TERMINAL BOARD	
	7	QYSBSB3010Z	TAPPING SCREW	(×4)
⚠	8	QMPD200-200-JC	POWER CORD	Within LINE FILTER PWB
⚠	9	LC20106-001C-A	CORD CLAMP	
⚠	10	LC10308-001E-A	REAR COVER	
	11	QYSBSFG4016Z	TAPPING SCREW	(×12)
⚠	13	CM23034-001-A	RATING LABEL	AV-32D201(US) / AV-32D201(A US)
⚠	13	CM22999-A01-A	RATING LABEL	AV-32D201(CA) / AV-32D201(A CA)
	15	LC30191-002A-A	REMOCON LENS	
	16	CM48006-006-C	JVC MARK	
	17	LC20217-001B-A	CONTROL KNOB	
	18	LC20409-001C-A	DOOR	
	19	CM48229-00A	DOOR LATCH	

Ⅰ. AV-27D201(US&CA) / Ⅱ. AV-32D201(US&CA) / Ⅲ. AV-32D201(A US & A CA)

EXPLODED VIEW



Ⅰ. AV-27D201(US&CA)

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SGR-1014A-M2)

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	R1003	NRSA02J-221X	MG R	220Ω 1/10W J
	R1004	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1005	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1006	NRSA02J-820X	MG R	82Ω 1/10W J
	R1201	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1202	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1203	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1204	NRSA02J-683X	MG R	68kΩ 1/10W J
	R1205	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1209	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1210	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1212	NRSA02J-471X	MG R	470Ω 1/10W J
	R1213-14	NRSA02J-821X	MG R	820Ω 1/10W J
	R1215	NRSA02J-681X	MG R	680Ω 1/10W J
	R1216	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1218-19	NRSA02J-101X	MG R	100Ω 1/10W J
	R1231	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1232	NRSA02J-221X	MG R	220Ω 1/10W J
	R1233	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1234	NRSA02J-821X	MG R	820Ω 1/10W J
	R1235	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1236	NRSA02J-105X	MG R	1MΩ 1/10W J
	R1237	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1238	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1241	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1242	NRSA02J-392X	MG R	3.9kΩ 1/10W J
	R1243	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R1245	NRSA02J-471X	MG R	470Ω 1/10W J
	R1246	NRSA02J-392X	MG R	3.9kΩ 1/10W J
	R1247-48	NRSA02J-471X	MG R	470Ω 1/10W J
	R1251	NRVA02D-102X	MF R	1kΩ 1/10W D
	R1252	NRVA02D-681X	MF R	680Ω 1/10W D
	R1253	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1254	NRSA02J-105X	MG R	1MΩ 1/10W J
	R1255	NRSA02J-124X	MG R	120kΩ 1/10W J
	R1261	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1262	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1263	NRSA02J-101X	MG R	100Ω 1/10W J
	R1271	NRSA02J-561X	MG R	560Ω 1/10W J
	R1272	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1273	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1274-75	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1276	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1277	NRSA02J-471X	MG R	470Ω 1/10W J
	R1278	NRSA02J-122X	MG R	1.2kΩ 1/10W J
	R1279	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1280-83	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1284	QRE121J-470Y	C R	47Ω 1/2W J
	R1301-02	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1401	NRVA02D-472X	MF R	4.7kΩ 1/10W D
	R1421	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1423	NRSA02J-393X	MG R	39kΩ 1/10W J
	R1424	NRSA02J-123X	MG R	12kΩ 1/10W J
	R1426	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1427	QRT029J-1R5	MF R	1.5Ω 2W J
	R1429	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1431	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1432	NRSA02J-101X	MG R	100Ω 1/10W J
	R1433	NRSA02J-471X	MG R	470Ω 1/10W J
	R1434	QRL029J-181	OM R	180Ω 2W J
	R1435	QRE121J-102Y	C R	1kΩ 1/2W J
	R1441	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1442	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1501	QRK126J-151X	C R	150Ω 1/2W J
	R1502	NRSA02J-101X	MG R	100Ω 1/10W J
	R1503	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1505	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1506	NRSA02J-101X	MG R	100Ω 1/10W J
	R1507	NRSA02J-681X	MG R	680Ω 1/10W J
	R1508-09	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1510	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1511	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R1512	NRSA02J-563X	MG R	56kΩ 1/10W J
	R1513	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1516	NRSA02J-821X	MG R	820Ω 1/10W J
	R1521	NRSA02J-331X	MG R	330Ω 1/10W J
	R1522	NRSA02J-271X	MG R	270Ω 1/10W J
	R1523	QRE121J-103Y	C R	10kΩ 1/2W J
	R1524-25	QRL039J-182	OM R	1.8kΩ 3W J
	R1531	QRE121J-220Y	C R	22Ω 1/2W J
	R1532	QRE121J-681Y	C R	680Ω 1/2W J
	R1533	QRL039J-103	OM R	10kΩ 3W J
⚠	R1541	QRK129J-150	C R	15Ω 1/2W J
	R1542	QRX01GJ-1R2	MF R	1.2Ω 1W J
⚠	R1544	QRZ9017-4R7	FUSI.RESISTOR	4.7 Ω 1/4W J
	R1545	QRE121J-332Y	C R	3.3kΩ 1/2W J
	R1547-48	QRE121J-184Y	C R	180kΩ 1/2W J
	R1553	NRSA02J-333X	MG R	33kΩ 1/10W J
⚠	R1556	QRA14CF-6341Y	MF R	6.34kΩ 1/4W F
⚠	R1557	QRA14CF-3301Y	MF R	3.3kΩ 1/4W F
	R1558	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1559	NRSA02J-123X	MG R	12kΩ 1/10W J
	R1560	NRSA02J-273X	MG R	27kΩ 1/10W J
	R1561	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1582	NRSA02J-331X	MG R	330Ω 1/10W J
	R1583	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1584	NRSA02J-821X	MG R	820Ω 1/10W J
	R1585	QRE121J-392Y	C R	3.9kΩ 1/2W J
	R1586	QRE121J-682Y	C R	6.8kΩ 1/2W J
	R1587	QRE121J-822Y	C R	8.2kΩ 1/2W J
	R1588	QRL039J-270	OM R	27Ω 3W J
	R1601	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1602	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1603	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1604	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1605	QRT029J-R15	MF R	0.15Ω 2W J
	R1606-07	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1611	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1612	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1615-16	NRSA02J-821X	MG R	820Ω 1/10W J
	R1617	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1620	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1701	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1704	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1705	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1706	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1708	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1710	NRSA02J-331X	MG R	330Ω 1/10W J
	R1714-16	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1717	NRSA02J-331X	MG R	330Ω 1/10W J
	R1718	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1719	NRSA02J-331X	MG R	330Ω 1/10W J
	R1720	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1721	NRSA02J-331X	MG R	330Ω 1/10W J
	R1724	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1725	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1726-27	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1728-29	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1730-31	NRSA02J-101X	MG R	100Ω 1/10W J
	R1732	NRSA02J-224X	MG R	220kΩ 1/10W J

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	
	R1733-34	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1736	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1739	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1741	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1742	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1743	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1744	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1745	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1746	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1747	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1749	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1750	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1753-54	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1756	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1757-58	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1759	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1765-66	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1767	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1772	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1773	NRSA02J-121X	MG R	120Ω 1/10W	J
	R1774	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1775	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1776	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1777	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1791-99	NRSA02J-471X	MG R	470Ω 1/10W	J
	R1801-04	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1805-07	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1821	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1822	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1823	NRSA02J-153X	MG R	15kΩ 1/10W	J
	R1824	NRSA02J-333X	MG R	33kΩ 1/10W	J
	R1825	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1826	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1831	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1832	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1833-34	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1835-36	NRSA02J-473X	MG R	47kΩ 1/10W	J
⚠	R1901	QRF074K-R47	UNF R	0.47 Ω 7W	K
	R1902	QRE121J-822Y	C R	8.2kΩ 1/2W	J
	R1903	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1904-05	QRT029J-R22	MF R	0.22Ω 2W	J
	R1906	QRE121J-822Y	C R	8.2kΩ 1/2W	J
	R1907-08	QRL039J-393	OM R	39kΩ 3W	J
	R1909	QRE121J-332Y	C R	3.3kΩ 1/2W	J
	R1912-13	QRE121J-333Y	C R	33kΩ 1/2W	J
	R1914	QRE121J-2R2Y	C R	2.2Ω 1/2W	J
	R1916	NRSA02J-152X	MG R	1.5kΩ 1/10W	J
	R1917	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1918	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1919	NRSA02J-152X	MG R	1.5kΩ 1/10W	J
	R1920	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1924	QRG01GJ-221	OM R	220Ω 1W	J
	R1925	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1926	QRT029J-R82	MF R	0.82Ω 2W	J
	R1928	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1931	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1933	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1934	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1936	QRE121J-222Y	C R	2.2kΩ 1/2W	J
	R1937	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1938	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1940	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1941	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1942	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1943	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1944	NRSA02J-393X	MG R	39kΩ 1/10W	J
	R1945-46	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1947	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1948	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1949	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1951-52	QRT029J-1R2	MF R	1.2Ω 2W	J
	R1954	QRE121J-272Y	C R	2.7kΩ 1/2W	J

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	
	R1955	QRE121J-473Y	C R	47kΩ 1/2W	J
	R1956	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1958-59	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1961	QRJ146J-3R3X	C R	3.3Ω 1/4W	J
	R1962	QRL029J-472	OM R	4.7kΩ 2W	J
	R1963	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1964	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1966	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1967	QRE121J-683Y	C R	68kΩ 1/2W	J
	R1971	QRL029J-150	OM R	15Ω 2W	J

CAPACITOR

Symbol No.	Part No.	Part Name	Description		
C1001	QETN1HM-475Z	E CAP.	4.7μF	50V	M
C1003	QETN1EM-476Z	E CAP.	47μF	25V	M
C1004	QETN1CM-227Z	E CAP.	220μF	16V	M
C1005	QETN1EM-476Z	E CAP.	47μF	25V	M
C1006	NCB21HK-103X	C CAP.	0.01μF	50V	K
C1007	QETN1HM-106Z	E CAP.	10μF	50V	M
C1009	NDC21HJ-151X	C CAP.	150pF	50V	J
C1011	NCB21HK-103X	C CAP.	0.01μF	50V	K
C1201	QETN1EM-476Z	E CAP.	47μF	25V	M
C1205	QETN1HM-106Z	E CAP.	10μF	50V	M
C1206	NCB21HK-104X	CHIP CAP.	0.1μF	50V	K
C1207	QETN1CM-108Z	E CAP.	1000μF	16V	M
C1208	NCB21HK-102X	C CAP.	1000pF	50V	K
C1225	QETN1EM-476Z	E CAP.	47μF	25V	M
C1231	QETN1HM-105Z	E CAP.	1μF	50V	M
C1233	NCB21HK-682X	C CAP.	6800pF	50V	K
C1234	NCB21EK-683X	C CAP.	0.068μF	25V	K
C1235	NCB21HK-223X	C CAP.	0.022μF	50V	K
C1241	QETN1EM-476Z	E CAP.	47μF	25V	M
C1242	QETN1HM-106Z	E CAP.	10μF	50V	M
C1243	QETN1EM-476Z	E CAP.	47μF	25V	M
C1251	QETN1HM-105Z	E CAP.	1μF	50V	M
C1252	QETN1HM-475Z	E CAP.	4.7μF	50V	M
C1253	QETN1HM-225Z	E CAP.	2.2μF	50V	M
C1254	QETN1HM-105Z	E CAP.	1μF	50V	M
C1255	QETN1HM-106Z	E CAP.	10μF	50V	M
C1256	QETN1HM-105Z	E CAP.	1μF	50V	M
C1271	QETN1EM-476Z	E CAP.	47μF	25V	M
C1281	QETN1CM-108Z	E CAP.	1000μF	16V	M
C1283-87	QETN1HM-106Z	E CAP.	10μF	50V	M
C1288-89	QENC1EM-106Z	BP E CAP.	10μF	25V	M
C1301	NDC21HJ-9R0X	C CAP.	9.0pF	50V	J
C1302	NCB21HK-223X	C CAP.	0.022μF	50V	K
C1303	QENC1HM-105Z	BP E CAP.	1μF	50V	M
C1304	NCB21HK-223X	C CAP.	0.022μF	50V	K
C1305	NDC21HJ-180X	C CAP.	18pF	50V	J
C1306	NDC21HJ-101X	C CAP.	100pF	50V	J
C1307	QETN1AM-108Z	E CAP.	1000μF	10V	M
C1308	NCB21HK-104X	CHIP CAP.	0.1μF	50V	K
C1309	NCB21HK-102X	C CAP.	1000pF	50V	K
C1402	QFV71HJ-334Z	MF CAP.	0.33μF	50V	J
C1403	QFV71HJ-394Z	MF CAP.	0.39μF	50V	J
C1421	NCB21HK-102X	C CAP.	1000pF	50V	K
C1422	QFLC1HJ-103Z	M CAP.	0.01μF	50V	J
C1424	QETN1VM-107Z	E CAP.	100μF	35V	M
C1425	QETN1VM-477Z	E CAP.	470μF	35V	M
C1427	QETN1HM-225Z	E CAP.	2.2μF	50V	M
C1428	QETM1EM-228	E CAP.	2200μF	25V	M
C1431	QFLC1HJ-563Z	M CAP.	0.056μF	50V	J
C1432	QETN1HM-476Z	E CAP.	47μF	50V	M
C1433	QETN1EM-476Z	E CAP.	47μF	25V	M
C1434	NDC21HJ-100X	C CAP.	10pF	50V	J
C1435	NCB21HK-103X	C CAP.	0.01μF	50V	K
C1436	QFN32AK-224	M CAP.	0.22μF	100V	K
C1501	QETN1CM-337Z	E CAP.	330μF	16V	M
C1502-03	QETN1EM-476Z	E CAP.	47μF	25V	M
C1504	QETN1HM-106Z	E CAP.	10μF	50V	M
C1505	NCB21HK-333X	C CAP.	0.033μF	50V	K

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1506	NCB21HK-223X	C CAP.	0.022µF 50V K
	C1507	QETN1HM-106Z	E CAP.	10µF 50V M
	C1508	NDC21HG-201X	CHIP C CAPACITOR	200pF 50V G
	C1510	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1521	QCB32HK-151Z	C CAP.	150pF 500V K
	C1522	QCB32HK-331Z	C CAP.	330pF 500V K
	C1523	QEHR2CM-105Z	E CAP.	1µF 160V M
⚠	C1531	QFZ0196-472	MPP CAP.	4700pF1.5kVH ±3%
⚠	C1532	QFZ0198-133	MPP CAP.	0.013µF1.5kVH ±3%
⚠	C1533	QFP32GJ-223	PP CAP.	0.022µF 400V J
	C1534	QEHR2EM-225Z	E CAP.	2.2µF 250V M
⚠	C1535	QFZ0197-624	MPP CAP.	0.62µF 250V J
	C1536	QCB32HK-561Z	C CAP.	560pF 500V K
	C1538	QEZ0420-107	E CAP.	100µF 160V M
	C1541	QETN2EM-106Z	E CAP.	10µF 250V M
	C1542	QETM1VM-108	E CAP.	1000µF 35V M
	C1544	QETN1VM-107Z	E CAP.	100µF 35V M
	C1545	QFN32AJ-472Z	M CAP.	4700pF 100V J
	C1546	QFV71HJ-684Z	MF CAP.	0.68µF 50V J
	C1548	QCB32HK-561Z	C CAP.	560pF 500V K
	C1551	QETN1HM-106Z	E CAP.	10µF 50V M
	C1578-79	QEM61HK-475Z	E CAP.	4.7µF 50V K
	C1602	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1604	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1605	QETN1CM-107Z	E CAP.	100µF 16V M
	C1606	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1607	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1608-09	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1613	QETN1EM-476Z	E CAP.	47µF 25V M
	C1615-17	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1701	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1703	QETN1CM-107Z	E CAP.	100µF 16V M
	C1704	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1705	NDC21HJ-181X	C CAP.	180pF 50V J
	C1706	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1708	QETN1HM-105Z	E CAP.	1µF 50V M
	C1709	NDC21HJ-221X	C CAP.	220pF 50V J
	C1710-11	NDC21HJ-390X	C CAP.	39pF 50V J
	C1712	NDC21HJ-270X	C CAP.	27pF 50V J
	C1714	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1715	QETN1CM-107Z	E CAP.	100µF 16V M
	C1716	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1717-18	NDC21HJ-330X	C CAP.	33pF 50V J
	C1719	NDC21HJ-471X	C CAP.	470pF 50V J
	C1720-21	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1731	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	C1736	NCB21HK-102X	C CAP.	1000pF 50V K
	C1741	NCB21HK-102X	C CAP.	1000pF 50V K
	C1743	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1744	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	C1746	QETN1HM-106Z	E CAP.	10µF 50V M
	C1771	QETN1EM-476Z	E CAP.	47µF 25V M
	C1772	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1773	QETN1CM-107Z	E CAP.	100µF 16V M
	C1774	QETN1CM-227Z	E CAP.	220µF 16V M
	C1784	QETN1EM-476Z	E CAP.	47µF 25V M
	C1801-03	QETN1HM-105Z	E CAP.	1µF 50V M
⚠	C1906	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1907	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1908	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1910	QEZ0169-477	E CAP.	470µF 200V M
	C1911	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1912	QFN31HJ-102Z	M CAP.	1000pF 50V J
	C1913	QCZ0131-222	C CAP.	2200pF 2000V K
	C1914	QCZ0325-391	C CAP.	390pF 2000V K
	C1915	QFP32GJ-223	PP CAP.	0.022µF 400V J
	C1916	QCZ0131-332	C CAP.	3300pF 2000V K
	C1918	NCB21HK-102X	C CAP.	1000pF 50V K
	C1919	NCB21HK-332X	C CAP.	3300pF 50V K
	C1920	QFLC1HJ-823Z	M CAP.	0.082µF 50V J
	C1921	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1923	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1924	QEZ0420-107	E CAP.	100µF 160V M

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1925	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1926	QEHQ1VM-108	E CAP.	1000µF 35V M
	C1927	QETN1CM-227Z	E CAP.	220µF 16V M
	C1928	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1931	QETN1EM-476Z	E CAP.	47µF 25V M
	C1932	QEHR1VM-476Z	E CAP.	47µF 35V M
	C1933	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1934	NCB21HK-102X	C CAP.	1000pF 50V K
	C1935	QETN1HM-107Z	E CAP.	100µF 50V M
	C1937	QETN2CM-106Z	E CAP.	10µF 160V M
	C1938	NDC21HJ-471X	C CAP.	470pF 50V J
	C1951	QETN1CM-107Z	E CAP.	100µF 16V M
	C1952	QETN1HM-476Z	E CAP.	47µF 50V M
	C1954	QEHR1HM-226Z	E CAP.	22µF 50V M
	C1971	NCB21HK-104X	CHIP CAP.	0.1µF 50V K
	C1972	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1973	QETN1CM-108Z	E CAP.	1000µF 16V M
⚠	C1990	QCZ9074-103	C CAP.	0.01µFAC125V M
⚠	C1991	QCZ9074-103	C CAP.	0.01µFAC125V M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name	Description
	T1521	CE42034-002	H.DRIVE TRANSF.	
⚠	T1522	QQH0051-001	H.V.TRANSF.	
⚠	T1901	CETS124-001J8	SWITCH.TRANSF.	

COIL

⚠	Symbol No.	Part No.	Part Name	Description
	L1002	QQL29BJ-101Z	PEAKING COIL	100µH
	L1201	QQL29BJ-220Z	PEAKING COIL	22µH
⚠	L1531	CE41345-00A	LINEARITY COIL	
	L1532	QQLZ016-821	CHOKE COIL	
⚠	L1591	QQLZ018-220	HEATER CHOKE	
	L1701	QQL29BJ-4R7Z	PEAKING COIL	4.7µH
	L1702	QQL244J-100Z	COIL	10µH
	L1771	QQL29BJ-4R7Z	PEAKING COIL	4.7µH
	L1921-22	QQL42AK-820Z	COIL	82µH

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1001	MTZJ33A-T2	ZENER DIODE	
	D1241-42	1SS133-T2	SI.DIODE	
	D1244-45	1SS133-T2	SI.DIODE	
	D1421	1N4003-T2	SI.DIODE	
	D1422	MTZJ75-T2	ZENER DIODE	
	D1501	1SS133-T2	SI.DIODE	
	D1502-03	MTZJ6.2B-T2	ZENER DIODE	
	D1504	MTZJ5.1B-T2	ZENER DIODE	
	D1531	RH3G-F1	SI.DIODE	
	D1532	RU3AM-LFC4	SI.DIODE	
	D1533	RGP10J-5025-T3	SI.DIODE	
	D1541	RH1S-T3	SI.DIODE	
	D1542	RGP10J-5025-T3	SI.DIODE	
	D1544	1SS81-T2	SI.DIODE	
	D1546	1SR124-400A-T2	SI.DIODE	
	D1548	1SS133-T2	SI.DIODE	
	D1549	MTZJ5.6B-T2	ZENER DIODE	
⚠	D1551	MA4068N/Z1/-T2	ZENER DIODE	
	D1560-61	1SS133-T2	SI.DIODE	
	D1601-02	1SS133-T2	SI.DIODE	
	D1608-10	1SS133-T2	SI.DIODE	
	D1701-03	1SS133-T2	SI.DIODE	
	D1704-05	MTZJ5.6B-T2	ZENER DIODE	
	D1741-42	1SS133-T2	SI.DIODE	
	D1771-72	1SS133-T2	SI.DIODE	
	D1821	MTZJ15A-T2	ZENER DIODE	
	D1831-32	1SS133-T2	SI.DIODE	
⚠	D1901	D3SBA60-S1	BRIDGE DIODE	
	D1902	RGP10J-5025-T3	SI.DIODE	
	D1903-04	1SS133-T2	SI.DIODE	
	D1905	EG1A-T3	SI.DIODE	
	D1909	MTZJ15A-T2	ZENER DIODE	

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1910	RGP10J-5025-T3	SI.DIODE	
	D1911	1SS133-T2	SI.DIODE	
	D1912	MTZJ15A-T2	ZENER DIODE	
	D1913-14	RGP10J-5025-T3	SI.DIODE	
	D1916	RGP10J-5025-T3	SI.DIODE	
	D1918	MTZJ15A-T2	ZENER DIODE	
	D1919-20	1SS133-T2	SI.DIODE	
	D1921	RU30A-F1	SI.DIODE	
	D1922-23	RU3YX-LFC4	SI.DIODE	
	D1925	RGP10J-5025-T3	SI.DIODE	
	D1926-28	1SS133-T2	SI.DIODE	
	D1931	1SS133-T2	SI.DIODE	
	D1933	1SS133-T2	SI.DIODE	
	D1942	MTZJ6.8A-T2	ZENER DIODE	
	D1951	MTZJ7.5S-T2	ZENER DIODE	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q1001	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1201	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1203-04	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1205	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1231	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1241-42	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1261	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1271-74	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1521	2SC4212/Z1/	SI.TRANSISTOR	
⚠	Q1531	2SD2539-LB	SI.TRANSISTOR	H.OUT
	Q1541	2SA1037AK/QR/-X	SI.TRANSISTOR	
⚠	Q1542	2SC2785/JH/-T	SI.TRANSISTOR	
	Q1551-52	2SA1309A/QR/-T	SI.TRANSISTOR	
⚠	Q1553	2SD1408/OY/-LB	SI.TRANSISTOR	
	Q1602	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1603	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1604	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1742	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1743-44	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1821	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1822-23	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1831	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1832	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1911	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1912	2SD2088-T	SI.TRANSISTOR	
	Q1921-22	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1923	2SA1020/Y/-T	SI.TRANSISTOR	
	Q1924	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1925	2SA949/Y/Z1-T	SI.TRANSISTOR	
	Q1926	2SC2240/GL/-T	SI.TRANSISTOR	
	Q1927-28	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1942	2SD1383K/AB/-X	SI.TRANSISTOR	
	Q1943	2SC2240/GL/-T	SI.TRANSISTOR	
	Q1944	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1951	2SA949/Y/Z1-T	SI.TRANSISTOR	

IC

⚠	Symbol No.	Part No.	Part Name	Description
	IC1001	AN7805F	I.C.(MONO-ANA)	
	IC1201	JCC1007A	I.C.(MONO-ANA)	
	IC1281	M52055FP-X	I.C.(MONO-ANA)	
⚠	IC1421	LA7841	I.C.(MONO-ANA)	
	IC1423	AN78L09-T	I.C.(MONO-ANA)	
⚠	IC1601	LA4485	I.C.(MONO-ANA)	
	IC1701	MN1876478JD	I C	
	IC1702	AT24C02-32D501	I C	(SERVICE)
	IC1703	MN1381/Q/-T	I.C.(MONO-ANA)	
	IC1771	AN77L05-T	I.C.(MONO-ANA)	
⚠	IC1901	STR-F6626	I.C.(HYBRID)	
⚠	IC1941	SE135N	I.C.(HYBRID)	
	IC1971	AN7809F	I.C.(MONO-ANA)	

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description
	CF1001	QAX0349-001	CERAMIC FILTER	
	CF1501	CSB503F39	CER.RESONATOR	
	CF1701	FCR12.0M2S	CER.RESONATOR	
⚠	CP1902	ICP-N75-Y	I.C.PROTECT	
	K1421	CE42050-001Z	CORE	
	K1901-03	CE41433-001Z	BEADS CORE	
	K1905-06	CE41433-001Z	BEADS CORE	
	K1921-24	CE41433-001Z	BEADS CORE	
⚠	PC1901	TLP621(B)	I.C.(PH.COUPLER)	
⚠	PC1902	TLP621(B)	I.C.(PH.COUPLER)	
⚠	RY1901	QSK0084-001	RELAY	
⚠	RY1921	QSK0084-001	RELAY	
	S1421	QSL4A13-C02	LEVER SWITCH	
⚠	TH1901	CEKP007-002	P.THERMISTOR	
⚠	TU1001	QAU0133-001	TUNER	
	W1295	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1297	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1300	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1668	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1677	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1691-96	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1718-21	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1763-65	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1770	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1811	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1820	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1827-28	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1834	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1856	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1878-79	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1885	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1892	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1896	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1900	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1902	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	X1301	QAX0310-001Z	CRYSTAL	
	Y1602	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1604	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1709	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1711	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1720	NRSA02J-0R0X	MG R	0.0Ω 1/10W J

CRT SOCKET P.W. BOARD ASS'Y (SGR-3003A-M2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R3351-56	NRSA02J-221X	MG R	220Ω 1/10W J
	R3357-59	NRSA02J-101X	MG R	100Ω 1/10W J
	R3360	QRZ0111-152	C R	1500pF 1/2W K
	R3361	QRZ0111-152	C R	1500pF 1/2W K
	R3362	QRZ0111-152	C R	1500pF 1/2W K
	R3363-65	QRG029J-103	OM R	10kΩ 2W J
	R3366-68	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R3369-71	NRSA02J-101X	MG R	100Ω 1/10W J
	R3381	QRE121J-394Y	C R	390kΩ 1/2W J
	CAPACITOR			
	C3354-55	NCS21HJ-331X	C CAP.	330pF 50V J
	C3356	NCS21HJ-391X	C CAP.	390pF 50V J
	C3357	QETN1CM-107Z	E CAP.	100µF 16V M
⚠	C3382	QCZ0121-102	C CAP.	1000pF 3000V Z
	COIL			
	L3381	QQL39BK-101Z	COIL	100µH
	TRANSISTOR			
	Q3351-53	2SC4544-LB	SI.TRANSISTOR	
	Q3354-56	2SC2412K/QR/-X	SI.TRANSISTOR	
	OTHERS			
⚠	SK3351	CE42535-001J1	C.R.T.SOCKET	
	W3002	NRSA02J-0R0X	MG R	0.0Ω 1/10W J

FRONT CONTROL P.W. BOARD ASS'Y (SGR-4003A-M2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R4701	NRSA02J-103X	MG R	10kΩ 1/10W J
	R4702	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R4703	NRSA02J-153X	MG R	15kΩ 1/10W J
	R4704	NRSA02J-103X	MG R	10kΩ 1/10W J
	R4705	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R4706	NRSA02J-153X	MG R	15kΩ 1/10W J
	R4707	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R4708	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R4709	NRSA02J-561X	MG R	560Ω 1/10W J
	CAPACITOR			
	C4841	QETN1EM-476Z	E CAP.	47µF 25V M
	DIODE			
	D4701	SLR-342VR3F	L.E.D.	
	TRANSISTOR			
	Q4701-02	DTA124EKA-X	DIGI.TRANSISTOR	
	IC			
	IC4841	GP1U281Q	IFR DETECT UNIT	
	OTHERS			
		LC30190-001B-A	LED HOLDER	
	S4702	QSW0619-003Z	PUSH SWITCH	MENU
	S4703	QSW0619-003Z	PUSH SWITCH	CH -
	S4704	QSW0619-003Z	PUSH SWITCH	CH +
	S4705	QSW0619-003Z	PUSH SWITCH	VOL -
	S4706	QSW0619-003Z	PUSH SWITCH	VOL +
	S4707	QSW0619-003Z	PUSH SWITCH	POWER
	W4001-02	NRSA02J-0R0X	MG R	0.0Ω 1/10W J

AV SELECTOR P.W. BOARD ASS'Y (SGR-8004A-M2)

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	R8181	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8182	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R8183	NRSA02J-153X	MG R	15kΩ 1/10W J
	R8184	NRSA02J-683X	MG R	68kΩ 1/10W J
	R8185	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R8186	NRSA02J-333X	MG R	33kΩ 1/10W J
	R8187	NRVA02D-153X	MF R	15kΩ 1/10W D
	R8188	NRVA02D-152X	MF R	1.5kΩ 1/10W D
	R8189	NRSA02J-512X	MG R	5.1kΩ 1/10W J
	R8201-02	NRSA02J-101X	MG R	100Ω 1/10W J
	R8203	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R8204	NRSA02J-331X	MG R	330Ω 1/10W J
	R8210	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R8211	NRSA02J-153X	MG R	15kΩ 1/10W J
	R8212	NRSA02J-333X	MG R	33kΩ 1/10W J
	R8213	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8214	NRSA02J-181X	MG R	180Ω 1/10W J
	R8215	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R8216-17	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R8218	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8223	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R8224-25	NRSA02J-473X	MG R	47kΩ 1/10W J
	R8226	NRSA02J-101X	MG R	100Ω 1/10W J
	R8227	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R8229	NRSA02J-473X	MG R	47kΩ 1/10W J
	R8230	NRSA02J-223X	MG R	22kΩ 1/10W J
	R8231	NRSA02J-101X	MG R	100Ω 1/10W J
	R8232-33	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8234	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R8235-36	NRSA02J-101X	MG R	100Ω 1/10W J
	R8237	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8241	NRSA02J-821X	MG R	820Ω 1/10W J
	R8251	NRSA02J-471X	MG R	470Ω 1/10W J
	R8255	NRSA02J-471X	MG R	470Ω 1/10W J
	R8256	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R8257	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R8258	NRSA02J-101X	MG R	100Ω 1/10W J
	R8259	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R8271	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8272	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R8273	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R8275	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R8276	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R8301	NRSA02J-221X	MG R	220Ω 1/10W J
	R8303	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8304	NRSA02J-101X	MG R	100Ω 1/10W J
	R8305	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R8306	NRSA02J-471X	MG R	470Ω 1/10W J
	R8308	NRSA02J-331X	MG R	330Ω 1/10W J
	R8310-11	NRSA02J-153X	MG R	15kΩ 1/10W J
	R8371	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R8372	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R8375	NRSA02J-183X	MG R	18kΩ 1/10W J
	R8376	NRSA02J-103X	MG R	10kΩ 1/10W J
	R8377	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R8378	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R8631-34	NRSA02J-101X	MG R	100Ω 1/10W J
	R8651-54	NRSA02J-223X	MG R	22kΩ 1/10W J
	R8655	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R8657	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R8659	NRSA02J-103X	MG R	10kΩ 1/10W J
	R8671-74	NRSA02J-103X	MG R	10kΩ 1/10W J
	R8675-76	NRSA02J-333X	MG R	33kΩ 1/10W J
	R8677-78	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R8681	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R8682	NRSA02J-223X	MG R	22kΩ 1/10W J
	R8684-87	NRSA02J-223X	MG R	22kΩ 1/10W J
	R8691-92	NRSA02J-221X	MG R	220Ω 1/10W J
	R8693-94	NRSA02J-823X	MG R	82kΩ 1/10W J

⚠	Symbol No.	Part No.	Part Name	Description
	R8695-96	NRSA02J-221X	MG R	220Ω 1/10W J
	R8801-03	NRSA02J-820X	MG R	82Ω 1/10W J
	R8804-05	NRSA02J-823X	MG R	82kΩ 1/10W J
	R8808	NRSA02J-820X	MG R	82Ω 1/10W J
	R8809-10	NRSA02J-823X	MG R	82kΩ 1/10W J
	R8813	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8814-16	NRSA02J-221X	MG R	220Ω 1/10W J
	R8817-18	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8819	NRSA02J-221X	MG R	220Ω 1/10W J
	R8820-21	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8825	NRSA02J-221X	MG R	220Ω 1/10W J
	R8826-27	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8831-33	NRSA02J-563X	MG R	56kΩ 1/10W J
	R8837	NRSA02J-101X	MG R	100Ω 1/10W J
	R8843-44	NRSA02J-101X	MG R	100Ω 1/10W J
	R8851	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R8852	NRSA02J-223X	MG R	22kΩ 1/10W J
	R8861-63	NRSA02J-820X	MG R	82Ω 1/10W J
	R8864-65	NRSA02J-223X	MG R	22kΩ 1/10W J
	R8866-67	NRSA02J-153X	MG R	15kΩ 1/10W J
	R8868-69	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R8870-71	NRSA02J-271X	MG R	270Ω 1/10W J
	R8872-73	NRSA02J-102X	MG R	1kΩ 1/10W J
	R8874-75	NRSA02J-152X	MG R	1.5kΩ 1/10W J

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C8181	NCB21HK-104X	CHIP CAP.	0.1μF 50V K
	C8182	QENC1HM-475Z	BP E CAP.	4.7μF 50V M
	C8183	QENC1HM-105Z	BP E CAP.	1μF 50V M
	C8184	QETN1HM-225Z	E CAP.	2.2μF 50V M
	C8185	NCB21HK-473X	C CAP.	0.047μF 50V K
	C8186	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C8187-88	NCB21HK-104X	CHIP CAP.	0.1μF 50V K
	C8189	QBTC1CK-335Z	TAN.CAP.	3.3μF 16V K
	C8190	QETN1HM-105Z	E CAP.	1μF 50V M
	C8191	QBTC1CK-106Z	TAN.CAP.	10μF 16V K
	C8192-93	QETN1HM-105Z	E CAP.	1μF 50V M
	C8194	QETN1HM-475Z	E CAP.	4.7μF 50V M
	C8195	QETN1HM-105Z	E CAP.	1μF 50V M
	C8201	QETN1CM-107Z	E CAP.	100μF 16V M
	C8203	QETN1EM-476Z	E CAP.	47μF 25V M
	C8204	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8208	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8209	QETN1EM-476Z	E CAP.	47μF 25V M
	C8211	QENC1EM-106Z	BP E CAP.	10μF 25V M
	C8212	NDC21HJ-101X	C CAP.	100pF 50V J
	C8213	NDC21HJ-470X	C CAP.	47pF 50V J
	C8214	NDC21HJ-181X	C CAP.	180pF 50V J
	C8215	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C8216	NDC21HJ-221X	C CAP.	220pF 50V J
	C8222	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8224	NDC21HJ-100X	C CAP.	10pF 50V J
	C8225-26	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8231-32	QETN1EM-476Z	E CAP.	47μF 25V M
	C8241-45	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8246	NDC21HJ-181X	C CAP.	180pF 50V J
	C8247-49	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8251	QETN1EM-476Z	E CAP.	47μF 25V M
	C8252	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8255	NDC21HJ-390X	C CAP.	39pF 50V J
	C8304	NDC21HJ-560X	C CAP.	56pF 50V J
	C8306	NDC21HJ-820X	C CAP.	82pF 50V J
	C8307	NDC21HJ-271X	C CAP.	270pF 50V J
	C8308	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8371	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8375	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8631	QETN1CM-107Z	E CAP.	100μF 16V M
	C8632	NCB21HK-103X	C CAP.	0.01μF 50V K

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C8633	QETN1EM-476Z	E CAP.	47μF 25V M
	C8634	NCB21HK-273X	C CAP.	0.027μF 50V K
	C8635	QETN1HM-225Z	E CAP.	2.2μF 50V M
	C8636	NCB21HK-222X	C CAP.	2200pF 50V K
	C8637	NCB21HK-104X	CHIP CAP.	0.1μF 50V K
	C8638	QETN1HM-225Z	E CAP.	2.2μF 50V M
	C8639	NCB21HK-222X	C CAP.	2200pF 50V K
	C8640	NCB21HK-104X	CHIP CAP.	0.1μF 50V K
	C8643	QETN1HM-105Z	E CAP.	1μF 50V M
	C8651-52	QENC1HM-105Z	BP E CAP.	1μF 50V M
	C8653-54	NCB21HK-332X	C CAP.	3300pF 50V K
	C8655-56	NCB21HK-333X	C CAP.	0.033μF 50V K
	C8657-58	QETN1HM-106Z	E CAP.	10μF 50V M
	C8659	QETN1EM-476Z	E CAP.	47μF 25V M
	C8660	NCB21HK-104X	CHIP CAP.	0.1μF 50V K
	C8671-72	QENC1HM-105Z	BP E CAP.	1μF 50V M
	C8673	QETN1EM-476Z	E CAP.	47μF 25V M
	C8691-92	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C8814	QETN1HM-105Z	E CAP.	1μF 50V M
	C8815-16	QETN1HM-106Z	E CAP.	10μF 50V M
	C8817-18	QETN1HM-105Z	E CAP.	1μF 50V M
	C8819	QETN1HM-106Z	E CAP.	10μF 50V M
	C8820-21	QETN1HM-105Z	E CAP.	1μF 50V M
	C8824-25	NCB21HK-102X	C CAP.	1000pF 50V K
	C8834-37	NCB21HK-102X	C CAP.	1000pF 50V K
	C8840-41	QETN1HM-105Z	E CAP.	1μF 50V M
	C8845	QETN1HM-106Z	E CAP.	10μF 50V M
	C8846-47	NCB21HK-103X	C CAP.	0.01μF 50V K
	C8848-49	QENC1HM-105Z	BP E CAP.	1μF 50V M
	C8850-51	QETN1EM-476Z	E CAP.	47μF 25V M
	C8852	QENC1HM-105Z	BP E CAP.	1μF 50V M
	C8854	QETN1HM-106Z	E CAP.	10μF 50V M
	C8855	QENC1HM-105Z	BP E CAP.	1μF 50V M
	C8861-64	QETN1HM-106Z	E CAP.	10μF 50V M
	C8865-66	NDC21HJ-270X	C CAP.	27pF 50V J
	C8867-68	QETN1EM-476Z	E CAP.	47μF 25V M
	COIL			
	L8201	QQL29BJ-4R7Z	PEAKING COIL	4.7μH
	L8202	QQL29BJ-150Z	PEAKING COIL	15μH
	L8211	QQL29BJ-4R7Z	PEAKING COIL	4.7μH
	L8241	QQL29BJ-4R7Z	PEAKING COIL	4.7μH
	L8251	QQL29BJ-4R7Z	PEAKING COIL	4.7μH
	L8301	QQL29BJ-150Z	PEAKING COIL	15μH
	L8302	QQL29BJ-100Z	PEAKING COIL	10μH
	DIODE			
	D8691-92	MTZJ9.1C-T2	ZENER DIODE	
	D8703	MTZJ5.6B-T2	ZENER DIODE	
	D8814-21	MTZJ9.1C-T2	ZENER DIODE	
	D8824-27	MTZJ9.1C-T2	ZENER DIODE	
	D8841-42	MTZJ6.2B-T2	ZENER DIODE	
	D8863-66	MTZJ9.1C-T2	ZENER DIODE	
	TRANSISTOR			
	Q8201	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8211-12	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8217-18	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8219	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q8252	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q8253	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8271	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8301-02	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8304-05	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8371	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8681-82	DTC124EKA-X	DIGI.TRANSISTOR	
	Q8684-87	DTC323TK-X	DIGI.TRANSISTOR	
	Q8851-52	DTC124EKA-X	DIGI.TRANSISTOR	

⚠	Symbol No.	Part No.	Part Name	Description
	TRANSISTOR			
	Q8861-62	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q8863-64	2SA1037AK/QR/-X	SI.TRANSISTOR	
	IC			
	IC8201	TC90A45P	I.C.(DIGI-MOS)	
	IC8202	AN78L05-T	I.C.(MONO-ANA)	
	IC8631	UPC1851BCU	I.C.(MONO-ANA)	
	IC8651	NJM2150AD	I.C.(MONO-ANA)	
	IC8671	BA15218N	I.C.(MONO-ANA)	
	IC8681	TC4066BP/N/	I.C.(DIGI-MOS)	
	IC8801	CXA1545AS	I.C.(MONO-ANA)	
	IC8803	TC4066BP/N/	I.C.(DIGI-MOS)	
	OTHERS			
	CF8201	QAX0558-001	CERAMIC FILTER	
	DL8861-62	CE41785-002	LOWPASS FILTER	
	FL8861-63	CE42543-001	EMI FILTER	
	J8801	QNZ0454-001	PIN JACK	
	J8801	QNZ0117-001	PIN JACK	
	J8802	QNN0349-001	PIN JACK	
	J8802	QNN0182-001	PIN JACK	
	J8803	QNN0349-002	PIN JACK	
	J8804	QNN0348-001	PIN JACK	
	J8805	QNS0001-001	JACK	
	K8201	CE41433-001Z	BEADS CORE	
	K8242	CE41433-001Z	BEADS CORE	
	W8002	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8005-06	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8010	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8013	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8039	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8041	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8045	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8049	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8052-53	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8056	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8162	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8172	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W8183	NRSA02J-0R0X	MG R	0.0Ω 1/10W J

FRONT AV IN P.W. BOARD ASS’Y(SGR-8301A-M2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R8001	NRSA02J-820X	MG R	82Ω 1/10W J
	R8002-03	NRSA02J-823X	MG R	82kΩ 1/10W J
	OTHERS			
	J8001	QNN0281-003	PIN JACK	
	J8002	QNN0281-002	PIN JACK	
	J8003	QNN0282-001	PIN JACK	

LINE FILTER P.W. BOARD ASS'Y(SGR-9001A-M2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
⚠	R9998	QRZ9041-275	C R	2.7MΩ 1/2W K
	R9999	QRE121J-121Y	C R	120Ω 1/2W J
	CAPACITOR			
⚠	C9901	QFZ9067-104	MPP CAP.	0.1μFAC275V M
⚠	C9902	QFZ9067-473	MPP CAP.	0.047μFAC275V M
⚠	C9903	QFZ9067-104	MPP CAP.	0.1μFAC275V M
⚠	C9904	QCZ9052-102	C CAP.	1000pFAC125V M
	OTHERS			
⚠	CN90PW	QMPD200-200-JC	POWER CORD	
⚠	F9901	QMF0007-5R0J1	FUSE	5.0A
	FC9901	CEMG002-001Z	FUSE CLIP	
⚠	LF9901	CELF008-001J5	LINE FILTER	
⚠	LF9902	CE42335-001J1	LINE FILTER	
⚠	VA9901	ERZV10V621CS	VARISTOR	

IF P.W. BOARD ASS'Y(SGR0F002A-M2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R0101	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R0102	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R0103	QRE121J-101Y	C R	100Ω 1/2W J
	R0104	NRSA02J-180X	MG R	18Ω 1/10W J
	R0105	NRSA02J-270X	MG R	27Ω 1/10W J
	R0111-12	NRSA02J-154X	MG R	150kΩ 1/10W J
	R0113	NRSA02J-101X	MG R	100Ω 1/10W J
	R0116	NRSA02J-680X	MG R	68Ω 1/10W J
	R0117	NRSA02J-273X	MG R	27kΩ 1/10W J
	R0118	NRSA02J-223X	MG R	22kΩ 1/10W J
	R0131	NRSA02J-102X	MG R	1kΩ 1/10W J
	R0132	NRSA02J-331X	MG R	330Ω 1/10W J
	R0133	NRSA02J-821X	MG R	820Ω 1/10W J
	R0134	NRSA02J-391X	MG R	390Ω 1/10W J
	R0135	NRSA02J-102X	MG R	1kΩ 1/10W J
	R0161	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R0162	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R0163	NRSA02J-223X	MG R	22kΩ 1/10W J
	R0164	NRSA02J-102X	MG R	1kΩ 1/10W J
	R0165	NRSA02J-223X	MG R	22kΩ 1/10W J
	R0166	NRSA02J-103X	MG R	10kΩ 1/10W J
	R0167	NRSA02J-102X	MG R	1kΩ 1/10W J
	R0168	NRSA02J-101X	MG R	100Ω 1/10W J
	R0169	NRSA02J-561X	MG R	560Ω 1/10W J
	R0171	NRSA02J-103X	MG R	10kΩ 1/10W J
	CAPACITOR			
	C0101-02	NCB21HK-103X	C CAP.	0.01μF 50V K
	C0104-05	NCB21HK-103X	C CAP.	0.01μF 50V K
	C0106	QETN1HM-476Z	E CAP.	47μF 50V M
	C0107	NCB21HK-103X	C CAP.	0.01μF 50V K
	C0113-14	NCB21HK-103X	C CAP.	0.01μF 50V K
	C0116	QFV71HJ-224Z	MF CAP.	0.22μF 50V J

⚠	Symbol No.	Part No.	Part Name	Description
	CAPACITOR			
	C0117	QETN1EM-476Z	E CAP.	47μF 25V M
	C0118	NCB21HK-103X	C CAP.	0.01μF 50V K
	C0119	NDC21HJ-681X	C CAP.	680pF 50V J
	C0120	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C0124	NCB21HK-103X	C CAP.	0.01μF 50V K
	C0131	NCB21HK-103X	C CAP.	0.01μF 50V K
	C0161	QETN1HM-106Z	E CAP.	10μF 50V M
	C0163-64	NDC21HJ-470X	C CAP.	47pF 50V J
	C0165-66	NCB21HK-103X	C CAP.	0.01μF 50V K
	C0167	QENC1HM-105Z	BP E CAP.	1μF 50V M
	TRANSFORMER			
	T0111	QQR0907-001	I.F.TRANSFOMER	
	COIL			
	L0101	QQLZ014-R22	PEAKING COIL	0.22μH
	L0113	QQL29BJ-4R7Z	PEAKING COIL	4.7μH
	L0131	QQL29BJ-150Z	PEAKING COIL	15μH
	L0161	QQL29BJ-220Z	PEAKING COIL	22μH
	TRANSISTOR			
	Q0101	2SC5083/L-P/-T	SI.TRANSISTOR	
	Q0131	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q0161	2SC2412K/QR/-X	SI.TRANSISTOR	
	IC			
	IC0101	M52342SP	I.C.(MONO-ANA)	
	OTHERS			
	CF0131	QAX0339-001	CERAMIC FILTER	
	CF0161	SFSH4.5MCB	CERAMIC FILTER	
	SF0101	QAX0324-002	SAW FILTER	
	Y0002	NRSA02J-0R0X	MG R	0.0Ω 1/10W J

Ⅱ. AV-32D201(US&CA)

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SGR-1016A-M2)

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	R1003	NRSA02J-221X	MG R	220Ω 1/10W J
	R1004	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1005	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1006	NRSA02J-820X	MG R	82Ω 1/10W J
	R1201	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1202	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1203	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1204	NRSA02J-683X	MG R	68kΩ 1/10W J
	R1205	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1209	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1210	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1212	NRSA02J-471X	MG R	470Ω 1/10W J
	R1213-14	NRSA02J-821X	MG R	820Ω 1/10W J
	R1215	NRSA02J-681X	MG R	680Ω 1/10W J
	R1216	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1218-19	NRSA02J-101X	MG R	100Ω 1/10W J
	R1231	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1232	NRSA02J-221X	MG R	220Ω 1/10W J
	R1233	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1234	NRSA02J-821X	MG R	820Ω 1/10W J
	R1235	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1236	NRSA02J-105X	MG R	1MΩ 1/10W J
	R1237	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1238	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1241	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1242	NRSA02J-392X	MG R	3.9kΩ 1/10W J
	R1243	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R1245	NRSA02J-471X	MG R	470Ω 1/10W J
	R1246	NRSA02J-392X	MG R	3.9kΩ 1/10W J
	R1247-48	NRSA02J-471X	MG R	470Ω 1/10W J
	R1251	NRVA02D-102X	MF R	1kΩ 1/10W D
	R1252	NRVA02D-681X	MF R	680Ω 1/10W D
	R1253	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1254	NRSA02J-105X	MG R	1MΩ 1/10W J
	R1255	NRSA02J-124X	MG R	120kΩ 1/10W J
	R1261	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1262	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1263	NRSA02J-101X	MG R	100Ω 1/10W J
	R1271	NRSA02J-561X	MG R	560Ω 1/10W J
	R1272	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1273	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1274-75	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1276	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1277	NRSA02J-471X	MG R	470Ω 1/10W J
	R1278	NRSA02J-122X	MG R	1.2kΩ 1/10W J
	R1279	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1280-83	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1284	QRE121J-470Y	C R	47Ω 1/2W J
	R1301-02	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1401	NRVA02D-472X	MF R	4.7kΩ 1/10W D
	R1421	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1423	NRSA02J-393X	MG R	39kΩ 1/10W J
	R1424	NRSA02J-123X	MG R	12kΩ 1/10W J
	R1426	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1427	QRT029J-1R5	MF R	1.5Ω 2W J
	R1429	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1431	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1432	NRSA02J-101X	MG R	100Ω 1/10W J
	R1433	NRSA02J-471X	MG R	470Ω 1/10W J
	R1434	QRL029J-181	OM R	180Ω 2W J
	R1435	QRE121J-102Y	C R	1kΩ 1/2W J
	R1441	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1442	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1501	QRK126J-151X	C R	150Ω 1/2W J
	R1502	NRSA02J-101X	MG R	100Ω 1/10W J

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⚠	Symbol No.	Part No.	Part Name	Description
	R1503	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1505	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1506	NRSA02J-101X	MG R	100Ω 1/10W J
	R1507	NRSA02J-681X	MG R	680Ω 1/10W J
	R1508-09	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1510	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1511	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R1512	NRSA02J-563X	MG R	56kΩ 1/10W J
	R1513	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1516	NRSA02J-821X	MG R	820Ω 1/10W J
	R1521	NRSA02J-331X	MG R	330Ω 1/10W J
	R1522	NRSA02J-271X	MG R	270Ω 1/10W J
	R1523	QRE121J-103Y	C R	10kΩ 1/2W J
	R1524-25	QRG029J-152	OM R	1.5kΩ 2W J
	R1531	QRE121J-220Y	C R	22Ω 1/2W J
	R1532	QRE121J-681Y	C R	680Ω 1/2W J
	R1533	QRL039J-103	OM R	10kΩ 3W J
⚠	R1541	QRK129J-150	C R	15Ω 1/2W J
	R1542	QRX01GJ-1R2	MF R	1.2Ω 1W J
⚠	R1544	QRZ9017-4R7	F R	4.7 Ω 1/4W J
	R1545	QRE121J-332Y	C R	3.3kΩ 1/2W J
	R1547	QRE121J-154Y	C R	150kΩ 1/2W J
	R1548	QRE121J-184Y	C R	180kΩ 1/2W J
⚠	R1556	QRA14CF-7321Y	MF R	7.32kΩ 1/4W F
⚠	R1557	QRA14CF-3301Y	MF R	3.3kΩ 1/4W F
	R1558	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1559	NRSA02J-123X	MG R	12kΩ 1/10W J
	R1560	NRSA02J-273X	MG R	27kΩ 1/10W J
	R1561	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1582	NRSA02J-331X	MG R	330Ω 1/10W J
	R1583	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1584	NRSA02J-821X	MG R	820Ω 1/10W J
	R1585	QRE121J-392Y	C R	3.9kΩ 1/2W J
	R1586	QRE121J-682Y	C R	6.8kΩ 1/2W J
	R1587	QRE121J-822Y	C R	8.2kΩ 1/2W J
	R1588	QRL039J-270	OM R	27Ω 3W J
	R1601	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1602	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1603	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1604	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1605	QRT029J-R15	MF R	0.15Ω 2W J
	R1606-07	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1611	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1612	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1615-16	NRSA02J-821X	MG R	820Ω 1/10W J
	R1617	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1620	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1701	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1703	NRSA02J-823X	MG R	82kΩ 1/10W J
	R1704	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1705	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1706	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1708	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1710	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1714-16	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1717	NRSA02J-331X	MG R	330Ω 1/10W J
	R1718	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1719	NRSA02J-331X	MG R	330Ω 1/10W J
	R1720	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1721	NRSA02J-331X	MG R	330Ω 1/10W J
	R1724	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1725	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1726-27	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1728-29	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1730-31	NRSA02J-101X	MG R	100Ω 1/10W J

⚠	Symbol No.	Part No.	Part Name	Description

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⚠	Symbol No.	Part No.	Part Name	Description
	R1732	NRSA02J-224X	MG R	220kΩ 1/10W J
	R1733-34	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1736	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1739	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1741	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1742	NRSA02J-822X	MG R	8.2kΩ 1/10W J
	R1743	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1744	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1745	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1746	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1747	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1749	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1750	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1753-54	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1756	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1757-58	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1759	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1765-66	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1767	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1772	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1773	NRSA02J-121X	MG R	120Ω 1/10W J
	R1774	NRSA02J-101X	MG R	100Ω 1/10W J
	R1775	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1776	NRSA02J-101X	MG R	100Ω 1/10W J
	R1777	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1791-99	NRSA02J-471X	MG R	470Ω 1/10W J
	R1801-04	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1805-07	NRSA02J-101X	MG R	100Ω 1/10W J
	R1821	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1822	NRSA02J-822X	MG R	8.2kΩ 1/10W J
	R1823	NRSA02J-153X	MG R	15kΩ 1/10W J
	R1824	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1825	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1826	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1831	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1832	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1833-34	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1835-36	NRSA02J-473X	MG R	47kΩ 1/10W J
⚠	R1901	QRF074K-R47	UNF R	0.47 Ω 7W K
	R1902	QRE121J-822Y	C R	8.2kΩ 1/2W J
	R1903	NRSA02J-681X	MG R	680Ω 1/10W J
	R1904-05	QRT029J-R22	MF R	0.22Ω 2W J
	R1906	QRE121J-822Y	C R	8.2kΩ 1/2W J
	R1907-08	QRL039J-393	OM R	39kΩ 3W J
	R1909	QRE121J-332Y	C R	3.3kΩ 1/2W J
	R1912-13	QRE121J-333Y	C R	33kΩ 1/2W J
	R1914	QRE121J-2R2Y	C R	2.2Ω 1/2W J
	R1916	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1917	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1918	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R1919	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1920	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1924	QRG01GJ-221	OM R	220Ω 1W J
	R1925	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1926	QRT029J-R82	MF R	0.82Ω 2W J
	R1928	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1931	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1933	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1934	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1936	QRE121J-222Y	C R	2.2kΩ 1/2W J
	R1937	NRSA02J-822X	MG R	8.2kΩ 1/10W J
	R1938	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1940	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1941	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1942	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1943	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1944	NRSA02J-393X	MG R	39kΩ 1/10W J
	R1945-46	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1947	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1948	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1949	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1951-52	QRT029J-1R2	MF R	1.2Ω 2W J
	R1954	QRE121J-272Y	C R	2.7kΩ 1/2W J
	R1955	QRE121J-473Y	C R	47kΩ 1/2W J
	R1956	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1958-59	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1961	QRJ146J-3R3X	C R	3.3Ω 1/4W J
	R1962	QRL029J-472	OM R	4.7kΩ 2W J
	R1963	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1964	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1966	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1967	QRE121J-683Y	C R	68kΩ 1/2W J
	R1971	QRL029J-150	OM R	15Ω 2W J

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1001	QETN1HM-475Z	E CAP.	4.7µF 50V M
	C1003	QETN1EM-476Z	E CAP.	47µF 25V M
	C1004	QETN1CM-227Z	E CAP.	220µF 16V M
	C1005	QETN1EM-476Z	E CAP.	47µF 25V M
	C1006	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1007	QETN1HM-106Z	E CAP.	10µF 50V M
	C1009	NDC21HJ-151X	C CAP.	150pF 50V J
	C1011	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1201	QETN1EM-476Z	E CAP.	47µF 25V M
	C1205	QETN1HM-106Z	E CAP.	10µF 50V M
	C1206	NCB21HK-104X	CHIP CAP.	0.1µF 50V K
	C1207	QETN1CM-108Z	E CAP.	1000µF 16V M
	C1208	NCB21HK-102X	C CAP.	1000pF 50V K
	C1225	QETN1EM-476Z	E CAP.	47µF 25V M
	C1231	QETN1HM-105Z	E CAP.	1µF 50V M
	C1233	NCB21HK-682X	C CAP.	6800pF 50V K
	C1234	NCB21EK-683X	C CAP.	0.068µF 25V K
	C1235	NCB21HK-223X	C CAP.	0.022µF 50V K
	C1241	QETN1EM-476Z	E CAP.	47µF 25V M
	C1242	QETN1HM-106Z	E CAP.	10µF 50V M
	C1243	QETN1EM-476Z	E CAP.	47µF 25V M
	C1251	QETN1HM-105Z	E CAP.	1µF 50V M
	C1252	QETN1HM-475Z	E CAP.	4.7µF 50V M
	C1253	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1254	QETN1HM-105Z	E CAP.	1µF 50V M
	C1255	QETN1HM-106Z	E CAP.	10µF 50V M
	C1256	QETN1HM-105Z	E CAP.	1µF 50V M
	C1271	QETN1EM-476Z	E CAP.	47µF 25V M
	C1281	QETN1CM-108Z	E CAP.	1000µF 16V M
	C1283-87	QETN1HM-106Z	E CAP.	10µF 50V M
	C1288-89	QENC1EM-106Z	BP E CAP.	10µF 25V M
	C1301	NDC21HJ-9R0X	C CAP.	9.0pF 50V J
	C1302	NCB21HK-223X	C CAP.	0.022µF 50V K
	C1303	QENC1HM-105Z	BP E CAP.	1µF 50V M
	C1304	NCB21HK-223X	C CAP.	0.022µF 50V K
	C1305	NDC21HJ-180X	C CAP.	18pF 50V J
	C1306	NDC21HJ-101X	C CAP.	100pF 50V J
	C1307	QETN1AM-108Z	E CAP.	1000µF 10V M
	C1308	NCB21HK-104X	CHIP CAP.	0.1µF 50V K
	C1309	NCB21HK-102X	C CAP.	1000pF 50V K
	C1402	QFV71HJ-334Z	MF CAP.	0.33µF 50V J
	C1403	QFV71HJ-394Z	MF CAP.	0.39µF 50V J
	C1421	NCB21HK-102X	C CAP.	1000pF 50V K
	C1422	QFLC1HJ-103Z	M CAP.	0.01µF 50V J
	C1424	QETN1VM-107Z	E CAP.	100µF 35V M
	C1425	QETN1VM-477Z	E CAP.	470µF 35V M
	C1427	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1428	QETM1EM-228	E CAP.	2200µF 25V M
	C1431	QFLC1HJ-563Z	M CAP.	0.056µF 50V J
	C1432	QETN1HM-476Z	E CAP.	47µF 50V M
	C1433	QETN1EM-476Z	E CAP.	47µF 25V M
	C1434	NDC21HJ-100X	C CAP.	10pF 50V J
	C1435	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1436	QFN32AK-224	M CAP.	0.22µF 100V K
	C1501	QETN1CM-337Z	E CAP.	330µF 16V M
	C1502-03	QETN1EM-476Z	E CAP.	47µF 25V M
	C1504	QETN1HM-106Z	E CAP.	10µF 50V M

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1505	NCB21HK-333X	C CAP.	0.033μF 50V K
	C1506	NCB21HK-223X	C CAP.	0.022μF 50V K
	C1507	QETN1HM-106Z	E CAP.	10μF 50V M
	C1508	NDC21HG-201X	CHIP C CAP.	200pF 50V G
	C1510	QETN1HM-225Z	E CAP.	2.2μF 50V M
	C1521	QCB32HK-151Z	C CAP.	150pF 500V K
	C1522	QCB32HK-331Z	C CAP.	330pF 500V K
	C1523	QEHR2CM-105Z	E CAP.	1μF 160V M
⚠	C1531	QFZ0196-352	MPP CAP.	3500pF1.5kVH ±3%
⚠	C1532	QFZ0198-133	MPP CAP.	0.013μF1.5kVH ±3%
⚠	C1533	QFP32GJ-223	PP CAP.	0.022μF 400V J
	C1534	QEHR2EM-225Z	E CAP.	2.2μF 250V M
⚠	C1535	QFZ0197-624	MPP CAP.	0.62μF 250V J
	C1536	QCB32HK-561Z	C CAP.	560pF 500V K
	C1538	QEZ0420-107	E.CAP.	100μF 160V M
	C1541	QETN2EM-106Z	E CAP.	10μF 250V M
	C1542	QETM1VM-108	E CAP.	1000μF 35V M
	C1544	QETN1VM-107Z	E CAP.	100μF 35V M
	C1545	QFN32AJ-472Z	M CAP.	4700pF 100V J
	C1546	QFV71HJ-684Z	MF CAP.	0.68μF 50V J
	C1548	QCB32HK-561Z	C CAP.	560pF 500V K
	C1551	QETN1HM-106Z	E CAP.	10μF 50V M
	C1578-79	QEM61HK-475Z	E CAP.	4.7μF 50V K
	C1602	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1604	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1605	QETN1CM-107Z	E CAP.	100μF 16V M
	C1606	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1607	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1608-09	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1613	QETN1EM-476Z	E CAP.	47μF 25V M
	C1615-17	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1701-02	NCB21HK-103X	C CAP.	0.01μF 50V K
	C1703	QETN1CM-107Z	E CAP.	100μF 16V M
	C1704	NCB21HK-103X	C CAP.	0.01μF 50V K
	C1705	NDC21HJ-181X	C CAP.	180pF 50V J
	C1706	QETN1HM-474Z	E CAP.	0.47μF 50V M
	C1708	QETN1HM-105Z	E CAP.	1μF 50V M
	C1710-11	NDC21HJ-390X	C CAP.	39pF 50V J
	C1712	NDC21HJ-270X	C CAP.	27pF 50V J
	C1714	NCB21HK-103X	C CAP.	0.01μF 50V K
	C1715	QETN1CM-107Z	E CAP.	100μF 16V M
	C1716	NCB21HK-103X	C CAP.	0.01μF 50V K
	C1717-18	NDC21HJ-330X	C CAP.	33pF 50V J
	C1719	NDC21HJ-471X	C CAP.	470pF 50V J
	C1720-21	NCB21HK-103X	C CAP.	0.01μF 50V K
	C1731	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	C1736	NCB21HK-102X	C CAP.	1000pF 50V K
	C1741	NCB21HK-102X	C CAP.	1000pF 50V K
	C1743	NCB21HK-103X	C CAP.	0.01μF 50V K
	C1744	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	C1746	QETN1HM-106Z	E CAP.	10μF 50V M
	C1771	QETN1EM-476Z	E CAP.	47μF 25V M
	C1772	NCB21HK-103X	C CAP.	0.01μF 50V K
	C1773	QETN1CM-107Z	E CAP.	100μF 16V M
	C1774	QETN1CM-227Z	E CAP.	220μF 16V M
	C1784	QETN1EM-476Z	E CAP.	47μF 25V M
	C1801-03	QETN1HM-105Z	E CAP.	1μF 50V M
⚠	C1906	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1907	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1908	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1910	QEZ0169-477	E.CAP.	470μF 200V M
	C1911	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1912	QFN31HJ-102Z	M CAP.	1000pF 50V J
	C1913	QCZ0131-222	C CAP.	2200pF 2000V K
	C1914	QCZ0325-391	C CAP.	390pF 2000V K
	C1915	QFP32GJ-223	PP CAP.	0.022μF 400V J
	C1916	QCZ0131-332	C CAP.	3300pF 2000V K
	C1918	NCB21HK-102X	C CAP.	1000pF 50V K
	C1919	NCB21HK-332X	C CAP.	3300pF 50V K
	C1920	QFLC1HJ-823Z	M CAP.	0.082μF 50V J
	C1921	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1923	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1924	QEZ0420-107	E.CAP.	100μF 160V M

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1925	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1926	QEHQ1VM-108	E CAP.	1000μF 35V M
	C1927	QETN1CM-227Z	E CAP.	220μF 16V M
	C1928	QETN1EM-108Z	E CAP.	1000μF 25V M
	C1931	QETN1EM-476Z	E CAP.	47μF 25V M
	C1932	QEHR1VM-476Z	E CAP.	47μF 35V M
	C1933	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1934	NCB21HK-102X	C CAP.	1000pF 50V K
	C1935	QETN1HM-107Z	E CAP.	100μF 50V M
	C1937	QETN2CM-106Z	E CAP.	10μF 160V M
	C1938	NDC21HJ-471X	C CAP.	470pF 50V J
	C1951	QETN1CM-107Z	E CAP.	100μF 16V M
	C1952	QETN1HM-476Z	E CAP.	47μF 50V M
	C1954	QEHR1HM-226Z	E CAP.	22μF 50V M
	C1971	NCB21HK-104X	CHIP CAP.	0.1μF 50V K
	C1972	NCB21HK-103X	C CAP.	0.01μF 50V K
	C1973	QETN1CM-108Z	E CAP.	1000μF 16V M
⚠	C1990	QCZ9074-103	C CAP.	0.01μFAC125V M
⚠	C1991	QCZ9074-103	C CAP.	0.01μFAC125V M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name	Description
	T1521	CE42034-002	H.DRIVE TRANSF.	
⚠	T1522	QQH0051-001	H.V.TRANSF.	
⚠	T1901	CETS124-001J8	SWITCH.TRANSF.	

COIL

⚠	Symbol No.	Part No.	Part Name	Description
	L1002	QQL29BJ-101Z	PEAKING COIL	100μH
	L1201	QQL29BJ-220Z	PEAKING COIL	22μH
⚠	L1531	CE41663-00B	LINEARITY COIL	
	L1532	QQLZ016-821	CHOKE COIL	
⚠	L1591	QQLZ018-280	HEATER CHOKE	
	L1701	QQL29BJ-4R7Z	PEAKING COIL	4.7μH
	L1702	QQL244J-100Z	COIL	10μH
	L1771	QQL29BJ-4R7Z	PEAKING COIL	4.7μH
	L1921-22	QQL42AK-820Z	COIL	82μH

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1001	MTZJ33A-T2	ZENER DIODE	
	D1241-42	1SS133-T2	SI.DIODE	
	D1244-45	1SS133-T2	SI.DIODE	
	D1421	1N4003-T2	SI.DIODE	
	D1422	MTZJ75-T2	ZENER DIODE	
	D1501	1SS133-T2	SI.DIODE	
	D1502-03	MTZJ6.2B-T2	ZENER DIODE	
	D1504	MTZJ5.1B-T2	ZENER DIODE	
	D1531	RH3G-F1	SI.DIODE	
	D1532	RU3AM-LFC4	SI.DIODE	
	D1533	RGP10J-5025-T3	SI.DIODE	
	D1541	RH1S-T3	SI.DIODE	
	D1542	RGP10J-5025-T3	SI.DIODE	
	D1544	1SS81-T2	SI.DIODE	
	D1546	1SR124-400A-T2	SI.DIODE	
	D1548	1SS133-T2	SI.DIODE	
	D1549	MTZJ5.6B-T2	ZENER DIODE	
⚠	D1551	MA4068N/Z1/-T2	ZENER DIODE	
	D1560-61	1SS133-T2	SI.DIODE	
	D1601-02	1SS133-T2	SI.DIODE	
	D1608-10	1SS133-T2	SI.DIODE	
	D1701-03	1SS133-T2	SI.DIODE	
	D1704-05	MTZJ5.6B-T2	ZENER DIODE	
	D1741-42	1SS133-T2	SI.DIODE	
	D1771-72	1SS133-T2	SI.DIODE	
	D1821	MTZJ15A-T2	ZENER DIODE	
	D1831-32	1SS133-T2	SI.DIODE	
⚠	D1901	D3SBA60-S1	BRIDGE DIODE	
	D1902	RGP10J-5025-T3	SI.DIODE	
	D1903-04	1SS133-T2	SI.DIODE	
	D1905	EG1A-T3	SI.DIODE	
	D1909	MTZJ15A-T2	ZENER DIODE	

⚠	Symbol No.	Part No.	Part Name	Description

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1910	RGP10J-5025-T3	SI.DIODE	
	D1911	1SS133-T2	SI.DIODE	
	D1912	MTZJ15A-T2	ZENER DIODE	
	D1913-14	RGP10J-5025-T3	SI.DIODE	
	D1916	RGP10J-5025-T3	SI.DIODE	
	D1918	MTZJ15A-T2	ZENER DIODE	
	D1919-20	1SS133-T2	SI.DIODE	
	D1921	RU30A-F1	SI.DIODE	
	D1922-23	RU3YX-LFC4	SI.DIODE	
	D1925	RGP10J-5025-T3	SI.DIODE	
	D1926-28	1SS133-T2	SI.DIODE	
	D1931	1SS133-T2	SI.DIODE	
	D1933	1SS133-T2	SI.DIODE	
	D1942	MTZJ6.8A-T2	ZENER DIODE	
	D1951	MTZJ7.5S-T2	ZENER DIODE	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q1001	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1201	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1203-04	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1205	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1231	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1241-42	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1261	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1271-74	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1521	2SC4212/Z1/	SI.TRANSISTOR	
⚠	Q1531	2SD2539-LB	SI.TRANSISTOR	H.OUT
	Q1541	2SA1037AK/QR/-X	SI.TRANSISTOR	
⚠	Q1542	2SC2785/JH/-T	SI.TRANSISTOR	
	Q1551-52	2SA1309A/QR/-T	SI.TRANSISTOR	
⚠	Q1553	2SD1408/OY/-LB	SI.TRANSISTOR	
	Q1602	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1603	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1604	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1742	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1743-44	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1821	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1822-23	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1831	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1832	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1911	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1912	2SD2088-T	SI.TRANSISTOR	
	Q1921-22	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1923	2SA1020/Y/-T	SI.TRANSISTOR	
	Q1924	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1925	2SA949/Y/Z1-T	SI.TRANSISTOR	
	Q1926	2SC2240/GL/-T	SI.TRANSISTOR	
	Q1927-28	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1942	2SD1383K/AB/-X	SI.TRANSISTOR	
	Q1943	2SC2240/GL/-T	SI.TRANSISTOR	
	Q1944	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1951	2SA949/Y/Z1-T	SI.TRANSISTOR	

IC

⚠	Symbol No.	Part No.	Part Name	Description
	IC1001	AN7805F	I.C(MONO-ANA)	
	IC1201	JCC1007A	I.C(MONO-ANA)	
	IC1281	M52055FP-X	I.C(MONO-ANA)	
⚠	IC1421	LA7841	I.C(MONO-ANA)	
	IC1423	AN78L09-T	I.C(MONO-ANA)	
⚠	IC1601	LA4485	I.C(MONO-ANA)	
	IC1701	MN1876478JD	I C	
	IC1702	AT24C02-32D501	I.C(MEMORY-OTH)	(SERVICE)
	IC1703	MN1381/Q/-T	I.C(MONO-ANA)	
	IC1771	AN77L05-T	I.C(MONO-ANA)	
⚠	IC1901	STR-F6626	I.C(HYBRID)	
⚠	IC1941	SE135N	I.C(HYBRID)	
	IC1971	AN7809F	I.C(MONO-ANA)	

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description
	CF1001	QAX0349-001	CERAMIC FILTER	
	CF1501	CSB503F39	CER.RESONATOR	
	CF1701	FCR12.0M2S	CER.RESONATOR	

⚠	Symbol No.	Part No.	Part Name	Description

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description
⚠	CP1902	ICP-N75-Y	I.C.PROTECT	
	K1421	CE42050-001Z	CORE	
	K1901-03	CE41433-001Z	BEADS CORE	
	K1905-06	CE41433-001Z	BEADS CORE	
	K1921-24	CE41433-001Z	BEADS CORE	
⚠	PC1901	TLP621(B)	I.C(PH.COUPLER)	
⚠	PC1902	TLP621(B)	I.C(PH.COUPLER)	
⚠	RY1901	QSK0084-001	RELAY	
⚠	RY1921	QSK0084-001	RELAY	
	S1421	QSL4A13-C02	LEVER SWITCH	
⚠	TH1901	CEKP007-002	P.THERMISTOR	
⚠	TU1001	QAU0134-001	TUNER	
	W1295	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1297	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1300	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1668	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1677	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1691-96	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1718-21	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1763-65	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1770	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1811	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1820	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1827-28	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1834	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1856	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1878-79	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1885	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1892	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1896	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1900	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1902	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	X1301	QAX0310-001Z	CRYSTAL	
	Y1602	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1604	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1709	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1711	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1720	NRSA02J-0R0X	MG R	0.0Ω 1/10W J

CRT SOCKET P.W. BOARD ASS'Y (SGR-3003A-M2)

Refer to PARTS LIST in page 42 for this P.W. board.

FRONT CONTROL P.W. BOARD ASS'Y (SGR-4003A-M2)

Refer to PARTS LIST in page 42 for this P.W. board.

AV SELECTOR P.W. BOARD ASS'Y (SGR-8004A-M2)

Refer to PARTS LIST in page 43 for this P.W. board.

FRONT AV IN P.W. BOARD ASS'Y (SGR-8301A-M2)

Refer to PARTS LIST in page 44 for this P.W. board.

LINE FILTER P.W. BOARD ASS'Y (SGR-9002A-M2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
⚠	R9998	QRZ9041-275	CARBON RESISTOR	2.7MΩ 1/2W K
	R9999	QRE121J-121Y	C R	120Ω 1/2W J
	CAPACITOR			
⚠	C9901	QFZ9067-104	MPP CAP.	0.1μFAC275V M
⚠	C9902	QFZ9067-473	MPP CAP.	0.047μFAC275V M
⚠	C9903	QFZ9067-104	MPP CAP.	0.1μFAC275V M
⚠	C9904	QCZ9052-102	C CAP.	1000pFAC125V M
	OTHERS			
⚠	CN90PW	QMPD200-200-JC	POWER CORD	
⚠	F9901	QMF0007-5R0J1	FUSE	5.0A
	FC9901	CEMG002-001Z	FUSE CLIP	
⚠	LF9901	CELF001-001J1	LINE FILTER	
⚠	LF9902	CE42335-001J1	LINE FILTER	
⚠	VA9901	ERZV10V621CS	VARISTOR	

IF P.W. BOARD ASS'Y (SGR0F002A-M2)

Refer to PARTS LIST in page 45 for this P.W. board.

Ⅲ. AV-32D201(A US&A CA)

PRINTED WIRING BOARD PARTS LIST

MAIN P.W. BOARD ASS'Y (SGR-1017A-M2)

⚠	Symbol No.	Part No.	Part Name	Description
	RESISTOR			
	R1003	NRSA02J-221X	MG R	220Ω 1/10W J
	R1004	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1005	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1006	NRSA02J-820X	MG R	82Ω 1/10W J
	R1201	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1202	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1203	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1204	NRSA02J-683X	MG R	68kΩ 1/10W J
	R1205	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1209	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1210	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1212	NRSA02J-471X	MG R	470Ω 1/10W J
	R1213-14	NRSA02J-821X	MG R	820Ω 1/10W J
	R1215	NRSA02J-681X	MG R	680Ω 1/10W J
	R1216	NRSA02J-272X	MG R	2.7kΩ 1/10W J
	R1218	NRSA02J-101X	MG R	100Ω 1/10W J
	R1219	NRSA02J-101X	MG R	100Ω 1/10W J
	R1231	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1232	NRSA02J-221X	MG R	220Ω 1/10W J
	R1233	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1234	NRSA02J-821X	MG R	820Ω 1/10W J
	R1235	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1236	NRSA02J-105X	MG R	1MΩ 1/10W J
	R1237	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1238	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1241	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1242	NRSA02J-392X	MG R	3.9kΩ 1/10W J
	R1243	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R1245	NRSA02J-471X	MG R	470Ω 1/10W J
	R1246	NRSA02J-392X	MG R	3.9kΩ 1/10W J
	R1247-48	NRSA02J-471X	MG R	470Ω 1/10W J
	R1251	NRVA02D-102X	MF R	1kΩ 1/10W D
	R1252	NRVA02D-681X	MF R	680Ω 1/10W D
	R1253	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1254	NRSA02J-105X	MG R	1MΩ 1/10W J
	R1255	NRSA02J-124X	MG R	120kΩ 1/10W J
	R1261	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1262	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1263	NRSA02J-101X	MG R	100Ω 1/10W J
	R1271	NRSA02J-561X	MG R	560Ω 1/10W J
	R1272	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1273	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1274-75	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1276	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1277	NRSA02J-471X	MG R	470Ω 1/10W J
	R1278	NRSA02J-122X	MG R	1.2kΩ 1/10W J
	R1279	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1280-83	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1284	QRE121J-470Y	C R	47Ω 1/2W J
	R1301-02	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1401	NRVA02D-472X	MF R	4.7kΩ 1/10W D
	R1421	NRSA02J-562X	MG R	5.6kΩ 1/10W J
	R1423	NRSA02J-393X	MG R	39kΩ 1/10W J
	R1424	NRSA02J-123X	MG R	12kΩ 1/10W J
	R1426	NRSA02J-183X	MG R	18kΩ 1/10W J
	R1427	QRT029J-1R5	MF R	1.5Ω 2W J
	R1429	NRSA02J-472X	MG R	4.7kΩ 1/10W J
	R1431	NRSA02J-152X	MG R	1.5kΩ 1/10W J
	R1432	NRSA02J-101X	MG R	100Ω 1/10W J
	R1433	NRSA02J-471X	MG R	470Ω 1/10W J
	R1434	QRL029J-181	OM R	180Ω 2W J
	R1435	QRE121J-102Y	C R	1kΩ 1/2W J
	R1441	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1442	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1501	QRK126J-151X	C R	150Ω 1/2W J
	R1502	NRSA02J-101X	MG R	100Ω 1/10W J
	R1503	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1505	NRSA02J-473X	MG R	47kΩ 1/10W J
	R1506	NRSA02J-101X	MG R	100Ω 1/10W J
	R1507	NRSA02J-681X	MG R	680Ω 1/10W J
	R1508-09	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1510	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1511	NRSA02J-182X	MG R	1.8kΩ 1/10W J
	R1512	NRSA02J-563X	MG R	56kΩ 1/10W J
	R1513	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1516	NRSA02J-821X	MG R	820Ω 1/10W J
	R1521	NRSA02J-331X	MG R	330Ω 1/10W J
	R1522	NRSA02J-271X	MG R	270Ω 1/10W J
	R1523	QRE121J-103Y	C R	10kΩ 1/2W J
	R1524-25	QRG029J-152	OM R	1.5kΩ 2W J
	R1531	QRE121J-220Y	C R	22Ω 1/2W J
	R1532	QRE121J-681Y	C R	680Ω 1/2W J
	R1533	QRL039J-103	OM R	10kΩ 3W J
	R1541	QRK129J-150	C R	15Ω 1/2W J
	R1542	QRX01GJ-1R2	MF R	1.2Ω 1W J
⚠	R1544	QRZ9017-4R7	FUSI.RESISTOR	4.7 Ω 1/4W J
	R1545	QRE121J-332Y	C R	3.3kΩ 1/2W J
	R1547	QRE121J-154Y	C R	150kΩ 1/2W J
	R1548	QRE121J-184Y	C R	180kΩ 1/2W J
⚠	R1556	QRA14CF-7321Y	MF R	7.32kΩ 1/4W F
⚠	R1557	QRA14CF-3301Y	MF R	3.3kΩ 1/4W F
	R1558	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1559	NRSA02J-123X	MG R	12kΩ 1/10W J
	R1560	NRSA02J-273X	MG R	27kΩ 1/10W J
	R1561	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1582	NRSA02J-331X	MG R	330Ω 1/10W J
	R1583	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1584	NRSA02J-821X	MG R	820Ω 1/10W J
	R1585	QRE121J-392Y	C R	3.9kΩ 1/2W J
	R1586	QRE121J-682Y	C R	6.8kΩ 1/2W J
	R1587	QRE121J-822Y	C R	8.2kΩ 1/2W J
	R1588	QRL039J-150	OM R	15Ω 3W J
	R1601	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1602	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1603	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1604	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1605	QRT029J-R15	MF R	0.15Ω 2W J
	R1606-07	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1611	NRSA02J-333X	MG R	33kΩ 1/10W J
	R1612	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1615-16	NRSA02J-821X	MG R	820Ω 1/10W J
	R1617	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1620	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1701	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1704	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	R1705	NRSA02J-103X	MG R	10kΩ 1/10W J
	R1706	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1708	NRSA02J-223X	MG R	22kΩ 1/10W J
	R1710	NRSA02J-331X	MG R	330Ω 1/10W J
	R1714-16	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1717	NRSA02J-331X	MG R	330Ω 1/10W J
	R1718	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1719	NRSA02J-331X	MG R	330Ω 1/10W J
	R1720	NRSA02J-222X	MG R	2.2kΩ 1/10W J
	R1721	NRSA02J-331X	MG R	330Ω 1/10W J
	R1724	NRSA02J-102X	MG R	1kΩ 1/10W J
	R1725	NRSA02J-104X	MG R	100kΩ 1/10W J
	R1726-27	NRSA02J-682X	MG R	6.8kΩ 1/10W J
	R1728-29	NRSA02J-332X	MG R	3.3kΩ 1/10W J
	R1730	NRSA02J-101X	MG R	100Ω 1/10W J

⚠	Symbol No.	Part No.	Part Name	Description	
	RESISTOR				
	R1731	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1732	NRSA02J-224X	MG R	220kΩ 1/10W	J
	R1733-34	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1736	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1739	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1741	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1742	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1743	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1744	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1745	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1746	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1747	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1749	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1750	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1753-54	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1756	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1757-58	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1759	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1765-66	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1767	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1772	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1773	NRSA02J-121X	MG R	120Ω 1/10W	J
	R1774	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1775	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1776	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1777	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1791-99	NRSA02J-471X	MG R	470Ω 1/10W	J
	R1801-04	NRSA02J-332X	MG R	3.3kΩ 1/10W	J
	R1805	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1806	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1807	NRSA02J-101X	MG R	100Ω 1/10W	J
	R1821	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1822	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1823	NRSA02J-153X	MG R	15kΩ 1/10W	J
	R1824	NRSA02J-333X	MG R	33kΩ 1/10W	J
	R1825	NRSA02J-472X	MG R	4.7kΩ 1/10W	J
	R1826	NRSA02J-473X	MG R	47kΩ 1/10W	J
	R1831	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1832	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1833-34	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1835-36	NRSA02J-473X	MG R	47kΩ 1/10W	J
⚠	R1901	QRF074K-R47	UNF R	0.47 Ω 7W	K
	R1902	QRE121J-822Y	C R	8.2kΩ 1/2W	J
	R1903	NRSA02J-681X	MG R	680Ω 1/10W	J
	R1904-05	QRT029J-R22	MF R	0.22Ω 2W	J
	R1906	QRE121J-822Y	C R	8.2kΩ 1/2W	J
	R1907-08	QRL039J-393	OM R	39kΩ 3W	J
	R1909	QRE121J-332Y	C R	3.3kΩ 1/2W	J
	R1912-13	QRE121J-333Y	C R	33kΩ 1/2W	J
	R1914	QRE121J-2R2Y	C R	2.2Ω 1/2W	J
	R1916	NRSA02J-152X	MG R	1.5kΩ 1/10W	J
	R1917	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1918	NRSA02J-182X	MG R	1.8kΩ 1/10W	J
	R1919	NRSA02J-152X	MG R	1.5kΩ 1/10W	J
	R1920	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1924	QRG01GJ-221	OM R	220Ω 1W	J
	R1925	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1926	QRT029J-R82	MF R	0.82Ω 2W	J
	R1928	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1931	NRSA02J-682X	MG R	6.8kΩ 1/10W	J
	R1933	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1934	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1936	QRE121J-222Y	C R	2.2kΩ 1/2W	J
	R1937	NRSA02J-822X	MG R	8.2kΩ 1/10W	J
	R1938	NRSA02J-272X	MG R	2.7kΩ 1/10W	J
	R1940	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1941	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1942	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1943	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1944	NRSA02J-393X	MG R	39kΩ 1/10W	J
	R1945-46	NRSA02J-102X	MG R	1kΩ 1/10W	J
	R1947	NRSA02J-472X	MG R	4.7kΩ 1/10W	J

⚠	Symbol No.	Part No.	Part Name	Description	
	RESISTOR				
	R1948	NRSA02J-222X	MG R	2.2kΩ 1/10W	J
	R1949	NRSA02J-104X	MG R	100kΩ 1/10W	J
	R1951-52	QRT029J-1R2	MF R	1.2Ω 2W	J
	R1954	QRE121J-272Y	C R	2.7kΩ 1/2W	J
	R1955	QRE121J-473Y	C R	47kΩ 1/2W	J
	R1956	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1958-59	NRSA02J-0R0X	MG R	0.0Ω 1/10W	J
	R1961	QRJ146J-3R3X	C R	3.3Ω 1/4W	J
	R1962	QRL029J-472	OM R	4.7kΩ 2W	J
	R1963	NRSA02J-103X	MG R	10kΩ 1/10W	J
	R1964	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1966	NRSA02J-223X	MG R	22kΩ 1/10W	J
	R1967	QRE121J-683Y	C R	68kΩ 1/2W	J
	R1971	QRL029J-150	OM R	15Ω 2W	J
	CAPACITOR				
	C1001	QETN1HM-475Z	E CAP.	4.7μF 50V	M
	C1003	QETN1EM-476Z	E CAP.	47μF 25V	M
	C1004	QETN1CM-227Z	E CAP.	220μF 16V	M
	C1005	QETN1EM-476Z	E CAP.	47μF 25V	M
	C1006	NCB21HK-103X	C CAP.	0.01μF 50V	K
	C1007	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1009	NDC21HJ-151X	C CAP.	150pF 50V	J
	C1011	NCB21HK-103X	C CAP.	0.01μF 50V	K
	C1201	QETN1EM-476Z	E CAP.	47μF 25V	M
	C1205	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1206	NCB21HK-104X	CHIP CAP.	0.1μF 50V	K
	C1207	QETN1CM-108Z	E CAP.	1000μF 16V	M
	C1208	NCB21HK-102X	C CAP.	1000pF 50V	K
	C1225	QETN1EM-476Z	E CAP.	47μF 25V	M
	C1231	QETN1HM-105Z	E CAP.	1μF 50V	M
	C1233	NCB21HK-682X	C CAP.	6800pF 50V	K
	C1234	NCB21EK-683X	C CAP.	0.068μF 25V	K
	C1235	NCB21HK-223X	C CAP.	0.022μF 50V	K
	C1241	QETN1EM-476Z	E CAP.	47μF 25V	M
	C1242	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1243	QETN1EM-476Z	E CAP.	47μF 25V	M
	C1251	QETN1HM-105Z	E CAP.	1μF 50V	M
	C1252	QETN1HM-475Z	E CAP.	4.7μF 50V	M
	C1253	QETN1HM-225Z	E CAP.	2.2μF 50V	M
	C1254	QETN1HM-105Z	E CAP.	1μF 50V	M
	C1255	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1256	QETN1HM-105Z	E CAP.	1μF 50V	M
	C1271	QETN1EM-476Z	E CAP.	47μF 25V	M
	C1281	QETN1CM-108Z	E CAP.	1000μF 16V	M
	C1283-87	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1288-89	QENC1EM-106Z	BP E CAP.	10μF 25V	M
	C1301	NDC21HJ-9R0X	C CAP.	9.0pF 50V	J
	C1302	NCB21HK-223X	C CAP.	0.022μF 50V	K
	C1303	QENC1HM-105Z	BP E CAP.	1μF 50V	M
	C1304	NCB21HK-223X	C CAP.	0.022μF 50V	K
	C1305	NDC21HJ-180X	C CAP.	18pF 50V	J
	C1306	NDC21HJ-101X	C CAP.	100pF 50V	J
	C1307	QETN1AM-108Z	E CAP.	1000μF 10V	M
	C1308	NCB21HK-104X	CHIP CAP.	0.1μF 50V	K
	C1309	NCB21HK-102X	C CAP.	1000pF 50V	K
	C1402	QFV71HJ-334Z	MF CAP.	0.33μF 50V	J
	C1403	QFV71HJ-394Z	MF CAP.	0.39μF 50V	J
	C1421	NCB21HK-102X	C CAP.	1000pF 50V	K
	C1422	QFLC1HJ-103Z	M CAP.	0.01μF 50V	J
	C1424	QETN1VM-107Z	E CAP.	100μF 35V	M
	C1425	QETN1VM-477Z	E CAP.	470μF 35V	M
	C1427	QETN1HM-225Z	E CAP.	2.2μF 50V	M
	C1428	QETM1EM-228	E CAP.	2200μF 25V	M
	C1431	QFLC1HJ-563Z	M CAP.	0.056μF 50V	J
	C1432	QETN1HM-476Z	E CAP.	47μF 50V	M
	C1433	QETN1EM-476Z	E CAP.	47μF 25V	M
	C1434	NDC21HJ-100X	C CAP.	10pF 50V	J
	C1435	NCB21HK-103X	C CAP.	0.01μF 50V	K
	C1436	QFN32AK-224	M CAP.	0.22μF 100V	K
	C1501	QETN1CM-337Z	E CAP.	330μF 16V	M

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1502-03	QETN1EM-476Z	E CAP.	47µF 25V M
	C1504	QETN1HM-106Z	E CAP.	10µF 50V M
	C1505	NCB21HK-333X	C CAP.	0.033µF 50V K
	C1506	NCB21HK-223X	C CAP.	0.022µF 50V K
	C1507	QETN1HM-106Z	E CAP.	10µF 50V M
	C1508	NDC21HG-201X	CHIP C CAP.	200pF 50V G
	C1510	QETN1HM-225Z	E CAP.	2.2µF 50V M
	C1521	QCB32HK-151Z	C CAP.	150pF 500V K
	C1522	QCB32HK-331Z	C CAP.	330pF 500V K
	C1523	QEHR2CM-105Z	E CAP.	1µF 160V M
⚠	C1531	QFZ0196-352	MPP CAP.	3500pF1.5kVH ±3%
⚠	C1532	QFZ0198-133	MPP CAP.	0.013µF1.5kVH ±3%
⚠	C1533	QFP32GJ-223	PP CAP.	0.022µF 400V J
	C1534	QEHR2EM-225Z	E CAP.	2.2µF 250V M
⚠	C1535	QFZ0197-534	MPP CAP.	0.53µF 250V J
	C1536	QCB32HK-561Z	C CAP.	560pF 500V K
	C1538	QEZ0420-107	E CAP.	100µF 160V M
	C1541	QETN2EM-106Z	E CAP.	10µF 250V M
	C1542	QETM1VM-108	E CAP.	1000µF 35V M
	C1544	QETN1VM-107Z	E CAP.	100µF 35V M
	C1545	QFN32AJ-472Z	M CAP.	4700pF 100V J
	C1546	QFV71HJ-684Z	MF CAP.	0.68µF 50V J
	C1548	QCB32HK-561Z	C CAP.	560pF 500V K
	C1551	QETN1HM-106Z	E CAP.	10µF 50V M
	C1578-79	QEM61HK-475Z	E CAP.	4.7µF 50V K
	C1602	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1604	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1605	QETN1CM-107Z	E CAP.	100µF 16V M
	C1606	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1607	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1608-09	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1613	QETN1EM-476Z	E CAP.	47µF 25V M
	C1615-17	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1701	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1703	QETN1CM-107Z	E CAP.	100µF 16V M
	C1704	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1705	NDC21HJ-181X	C CAP.	180pF 50V J
	C1706	QETN1HM-474Z	E CAP.	0.47µF 50V M
	C1708	QETN1HM-105Z	E CAP.	1µF 50V M
	C1709	NDC21HJ-221X	C CAP.	220pF 50V J
	C1710-11	NDC21HJ-390X	C CAP.	39pF 50V J
	C1712	NDC21HJ-270X	C CAP.	27pF 50V J
	C1714	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1715	QETN1CM-107Z	E CAP.	100µF 16V M
	C1716	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1717-18	NDC21HJ-330X	C CAP.	33pF 50V J
	C1719	NDC21HJ-471X	C CAP.	470pF 50V J
	C1720-21	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1731	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	C1736	NCB21HK-102X	C CAP.	1000pF 50V K
	C1741	NCB21HK-102X	C CAP.	1000pF 50V K
	C1743	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1744	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	C1746	QETN1HM-106Z	E CAP.	10µF 50V M
	C1771	QETN1EM-476Z	E CAP.	47µF 25V M
	C1772	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1773	QETN1CM-107Z	E CAP.	100µF 16V M
	C1774	QETN1CM-227Z	E CAP.	220µF 16V M
	C1784	QETN1EM-476Z	E CAP.	47µF 25V M
	C1801	QETN1HM-105Z	E CAP.	1µF 50V M
	C1802	QETN1HM-105Z	E CAP.	1µF 50V M
	C1803	QETN1HM-105Z	E CAP.	1µF 50V M
⚠	C1906	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1907	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1908	QCZ9078-102	C CAP.	1000pFAC250V M
⚠	C1910	QEZ0169-477	E CAP.	470µF 200V M
	C1911	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1912	QFN31HJ-102Z	M CAP.	1000pF 50V J
	C1913	QCZ0131-222	C CAP.	2200pF 2000V K
	C1914	QCZ0325-391	C CAP.	390pF 2000V K
	C1915	QFP32GJ-223	PP CAP.	0.022µF 400V J
	C1916	QCZ0131-332	C CAP.	3300pF 2000V K
	C1918	NCB21HK-102X	C CAP.	1000pF 50V K

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description
	C1919	NCB21HK-332X	C CAP.	3300pF 50V K
	C1920	QFLC1HJ-823Z	M CAP.	0.082µF 50V J
	C1921	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1923	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1924	QEZ0420-107	E CAP.	100µF 160V M
	C1925	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1926	QEHQ1VM-108	E CAP.	1000µF 35V M
	C1927	QETN1CM-227Z	E CAP.	220µF 16V M
	C1928	QETN1EM-108Z	E CAP.	1000µF 25V M
	C1931	QETN1EM-476Z	E CAP.	47µF 25V M
	C1932	QEHR1VM-476Z	E CAP.	47µF 35V M
	C1933	QCZ0132-152Z	C CAP.	1500pF 500V K
	C1934	NCB21HK-102X	C CAP.	1000pF 50V K
	C1935	QETN1HM-107Z	E CAP.	100µF 50V M
	C1937	QETN2CM-106Z	E CAP.	10µF 160V M
	C1938	NDC21HJ-471X	C CAP.	470pF 50V J
	C1951	QETN1CM-107Z	E CAP.	100µF 16V M
	C1952	QETN1HM-476Z	E CAP.	47µF 50V M
	C1954	QEHR1HM-226Z	E CAP.	22µF 50V M
	C1971	NCB21HK-104X	CHIP CAP.	0.1µF 50V K
	C1972	NCB21HK-103X	C CAP.	0.01µF 50V K
	C1973	QETN1CM-108Z	E CAP.	1000µF 16V M
⚠	C1990	QCZ9074-103	C CAP.	0.01µFAC125V M
⚠	C1991	QCZ9074-103	C CAP.	0.01µFAC125V M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name	Description
	T1521	CE42034-002	H.DRIVE TRANSF.	
⚠	T1522	QQH0051-001	H.V.TRANSF.	
⚠	T1901	CETS124-001J8	SWITCH.TRANSF.	

COIL

⚠	Symbol No.	Part No.	Part Name	Description
	L1002	QQL29BJ-101Z	PEAKING COIL	100µH
	L1201	QQL29BJ-220Z	PEAKING COIL	22µH
⚠	L1531	CE41663-00B	LINEARITY COIL	
	L1532	QQLZ016-821	CHOKE COIL	
⚠	L1591	QQLZ018-300	HEATER CHOKE	
	L1701	QQL29BJ-4R7Z	PEAKING COIL	4.7µH
	L1702	QQL244J-100Z	COIL	10µH
	L1771	QQL29BJ-4R7Z	PEAKING COIL	4.7µH
	L1921-22	QQL42AK-820Z	COIL	82µH

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
	D1001	MTZJ33A-T2	ZENER DIODE	
	D1241-42	1SS133-T2	SI.DIODE	
	D1244-45	1SS133-T2	SI.DIODE	
	D1421	1N4003-T2	SI.DIODE	
	D1422	MTZJ75-T2	ZENER DIODE	
	D1501	1SS133-T2	SI.DIODE	
	D1502-03	MTZJ6.2B-T2	ZENER DIODE	
	D1504	MTZJ5.1B-T2	ZENER DIODE	
	D1531	RH3G-F1	SI.DIODE	
	D1532	RU3AM-LFC4	SI.DIODE	
	D1533	RGP10J-5025-T3	SI.DIODE	
	D1541	RH1S-T3	SI.DIODE	
	D1542	RGP10J-5025-T3	SI.DIODE	
	D1544	1SS81-T2	SI.DIODE	
	D1546	1SR124-400A-T2	SI.DIODE	
	D1548	1SS133-T2	SI.DIODE	
	D1549	MTZJ5.6B-T2	ZENER DIODE	
⚠	D1551	MA4068N/Z1/-T2	ZENER DIODE	
	D1560-61	1SS133-T2	SI.DIODE	
	D1601-02	1SS133-T2	SI.DIODE	
	D1608-10	1SS133-T2	SI.DIODE	
	D1701-03	1SS133-T2	SI.DIODE	
	D1704-05	MTZJ5.6B-T2	ZENER DIODE	
	D1741-42	1SS133-T2	SI.DIODE	
	D1771-72	1SS133-T2	SI.DIODE	
	D1821	MTZJ15A-T2	ZENER DIODE	
	D1831-32	1SS133-T2	SI.DIODE	

DIODE

⚠	Symbol No.	Part No.	Part Name	Description
⚠	D1901	D3SBA60-S1	BRIDGE DIODE	
	D1902	RGP10J-5025-T3	SI.DIODE	
	D1903-04	1SS133-T2	SI.DIODE	
	D1905	EG1A-T3	SI.DIODE	
	D1909	MTZJ15A-T2	ZENER DIODE	
	D1910	RGP10J-5025-T3	SI.DIODE	
	D1911	1SS133-T2	SI.DIODE	
	D1912	MTZJ15A-T2	ZENER DIODE	
	D1913	RGP10J-5025-T3	SI.DIODE	
	D1914	RGP10J-5025-T3	SI.DIODE	
	D1916	RGP10J-5025-T3	SI.DIODE	
	D1918	MTZJ15A-T2	ZENER DIODE	
	D1919-20	1SS133-T2	SI.DIODE	
	D1921	RU30A-F1	SI.DIODE	
	D1922-23	RU3YX-LFC4	SI.DIODE	
	D1925	RGP10J-5025-T3	SI.DIODE	
	D1926-28	1SS133-T2	SI.DIODE	
	D1931	1SS133-T2	SI.DIODE	
	D1933	1SS133-T2	SI.DIODE	
	D1942	MTZJ6.8A-T2	ZENER DIODE	
	D1951	MTZJ7.5S-T2	ZENER DIODE	

TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description
	Q1001	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1201	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1203-04	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1205	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1231	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1241-42	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1261	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1271-74	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1521	2SC4212/Z1/	SI.TRANSISTOR	
⚠	Q1531	2SD2539-LB	SI.TRANSISTOR	H.OUT
	Q1541	2SA1037AK/QR/-X	SI.TRANSISTOR	
⚠	Q1542	2SC2785/JH/-T	SI.TRANSISTOR	
	Q1551-52	2SA1309A/QR/-T	SI.TRANSISTOR	
⚠	Q1553	2SD1408/OY/-LB	SI.TRANSISTOR	
	Q1602	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1603	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1604	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1742	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1743-44	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1821	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1822-23	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1831	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1832	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1911	2SA1037AK/QR/-X	SI.TRANSISTOR	
	Q1912	2SD2088-T	SI.TRANSISTOR	
	Q1921-22	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1923	2SA1020/Y/-T	SI.TRANSISTOR	
	Q1924	2SC2412K/QR/-X	SI.TRANSISTOR	
	Q1925	2SA949/Y/Z1-T	SI.TRANSISTOR	
	Q1926	2SC2240/GL/-T	SI.TRANSISTOR	
	Q1927-28	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1942	2SD1383K/AB/-X	SI.TRANSISTOR	
	Q1943	2SC2240/GL/-T	SI.TRANSISTOR	
	Q1944	DTC124EKA-X	DIGI.TRANSISTOR	
	Q1951	2SA949/Y/Z1-T	SI.TRANSISTOR	

IC

⚠	Symbol No.	Part No.	Part Name	Description
	IC1001	AN7805F	I.C(MONO-ANA)	
	IC1201	JCC1007A	I.C(MONO-ANA)	
	IC1281	M52055FP-X	I.C(MONO-ANA)	
⚠	IC1421	LA7841	I.C(MONO-ANA)	
	IC1423	AN78L09-T	I.C(MONO-ANA)	
⚠	IC1601	LA4485	I.C(MONO-ANA)	
	IC1701	MN1876478JD	I.C(MICRO-COMP)	
	IC1702	AT24C02-32D501	I C	(SERVICE)
	IC1703	MN1381/Q/-T	I.C(MONO-ANA)	
	IC1771	AN77L05-T	I.C(MONO-ANA)	
⚠	IC1901	STR-F6626	I.C(HYBRID)	
⚠	IC1941	SE135N	I.C(HYBRID)	
	IC1971	AN7809F	I.C(MONO-ANA)	

OTHERS

⚠	Symbol No.	Part No.	Part Name	Description
	CF1001	QAX0349-001	CERAMIC FILTER	
	CF1501	CSB503F39	CER.RESONATOR	
	CF1701	FCR12.0M2S	CER.RESONATOR	
	CN1001	QGB1505J1-15	CONNECTOR	
	CN1002	QGB1505J1-25	CONNECTOR	
	CN1004	QGB1505J1-15	CONNECTOR	
⚠	CP1902	ICP-N75-Y	I.C.PROTECT	
	K1421	CE42050-001Z	CORE	
	K1901	CE41433-001Z	BEADS CORE	
	K1902	CE41433-001Z	BEADS CORE	
	K1903	CE41433-001Z	BEADS CORE	
	K1905	CE41433-001Z	BEADS CORE	
	K1906	CE41433-001Z	BEADS CORE	
	K1921	CE41433-001Z	BEADS CORE	
	K1922	CE41433-001Z	BEADS CORE	
	K1923	CE41433-001Z	BEADS CORE	
	K1924	CE41433-001Z	BEADS CORE	
⚠	PC1901	TLP621(B)	I.C(PH.COUPLER)	
⚠	PC1902	TLP621(B)	I.C(PH.COUPLER)	
⚠	RY1901	QSK0084-001	RELAY	
⚠	RY1921	QSK0084-001	RELAY	
	S1421	QSL4A13-C02	LEVER SWITCH	
⚠	TH1901	CEKP007-002	P.THERMISTOR	
⚠	TU1001	QAU0133-001	TUNER	
	W1295	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1297	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1300	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1668	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1677	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1691-96	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1718-21	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1763-65	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1770	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1811	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1820	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1827-28	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1834	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1856	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1878-79	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1885	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1892	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1896	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1900	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	W1902	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	X1301	QAX0310-001Z	CRYSTAL	
	Y1602	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1604	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1709	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1711	NRSA02J-0R0X	MG R	0.0Ω 1/10W J
	Y1720	NRSA02J-0R0X	MG R	0.0Ω 1/10W J

CRT SOCKET P.W. BOARD ASS’Y (SGR-3003A-M2)

Refer to PARTS LIST in page 42 for this P.W. board.

FRONT CONTROL P.W. BOARD ASS’Y (SGR-4003A-M2)

Refer to PARTS LIST in page 42 for this P.W. board.

AV SELECTOR P.W. BOARD ASS’Y (SGR-8004A-M2)

Refer to PARTS LIST in page 43 for this P.W. board.

FRONT AV IN P.W. BOARD ASS’Y (SGR-8301A-M2)

Refer to PARTS LIST in page 44 for this P.W. board.

LINE FILTER P.W. BOARD ASS’Y (SGR-9002A-M2)

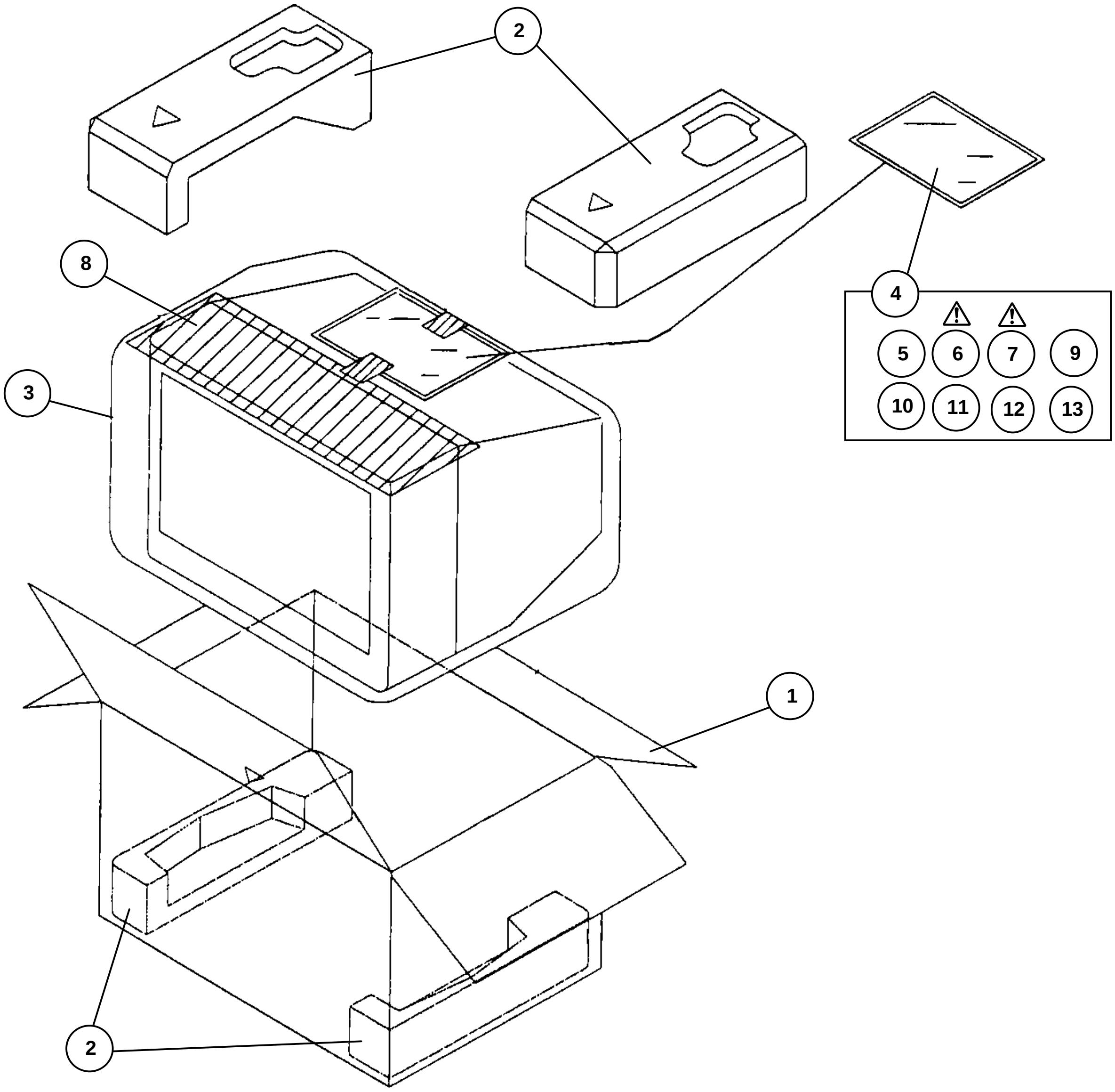
Refer to PARTS LIST in page 50 for this P.W. board.

IF P.W. BOARD ASS’Y (SGR0F002A-M2)

Refer to PARTS LIST in page 45 for this P.W. board.

Ⅰ. AV-27D201(US&CA) / Ⅱ. AV-32D201(US&CA) / Ⅲ. AV-32D201(A US & A CA)

PACKING



PACKING PARTS LIST

Ⅰ. [AV-27D201 (US&CA)]

⚠	Ref.No.	Part No.	Part Name	Description
	[America Model]			
	1	LC10181-008B-A	PACKING CASE	
	2	LC10367-002B-A	CUSHION ASSY	4pcs in 1set
	3	CP30056-008-A	POLY BAG	
	4	QPA02503505	POLY BAG	
	5	RM-C383-1A	REMOCON UNIT	
⚠	6	LCT0566-001A-A	INST BOOK	[ENGLISH]
	8	CP30055-001-A	TOP COVER	
	10	LCT0567-001A-A	SETUP GUIDE	[ENGLISH]
	12	BT-51006-1Q	REGISTER CARD	
	[Canada Model]			
	1	LC10181-008B-A	PACKING CASE	
	2	LC10367-002B-A	CUSHION ASSY	4pcs in 1set
	3	CP30056-008-A	POLY BAG	
	4	QPA02503505	POLY BAG	
	5	RM-C383-1A	REMOCON UNIT	
⚠	6	LCT0566-001A-A	INST BOOK	[ENGLISH]
⚠	7	LCT0568-001A-A	INST BOOK	[FRENCH]
	8	CP30055-001-A	TOP COVER	
	9	LCT0569-001A-A	SETUP GUIDE	[FRENCH]
	10	LCT0567-001A-A	SETUP GUIDE	[ENGLISH]
	11	BT-52004-1Q	WARRANTY CARD	
	13	BT-20071B-Q	SVC CENTER LIST	

Ⅱ. [AV-32D201 (US&CA)]

⚠	Ref.No.	Part No.	Part Name	Description
	[America Model]			
	1	LC10181-009B-A	PACKING CASE	
	2	LC10365-002A-A	CUSHION ASSY	4pcs in 1set
	3	CP30056-004-A	POLY BAG	
	4	QPA02503505	POLY BAG	
	5	RM-C383-1A	REMOCON UNIT	
⚠	6	LCT0566-001A-A	INST BOOK	[ENGLISH]
	8	CP30055-A02-A	TOP COVER	
	10	LCT0567-001A-A	SETUP GUIDE	[ENGLISH]
	12	BT-51006-1Q	REGISTER CARD	
	[Canada Model]			
	1	LC10181-009B-A	PACKING CASE	
	2	LC10365-002A-A	CUSHION ASSY	4pcs in 1set
	3	CP30056-004-A	POLY BAG	
	4	QPA02503505	POLY BAG	
	5	RM-C383-1A	REMOCON UNIT	
⚠	6	LCT0566-001A-A	INST BOOK	[ENGLISH]
⚠	7	LCT0568-001A-A	INST BOOK	[FRENCH]
	8	CP30055-A02-A	TOP COVER	
	9	LCT0569-001A-A	SETUP GUIDE	[FRENCH]
	10	LCT0567-001A-A	SETUP GUIDE	[ENGLISH]
	11	BT-52004-1Q	WARRANTY CARD	
	13	BT-20071B-Q	SVC CENTER LIST	

Ⅲ. [AV-32D201 (A US&A CA)]

⚠	Ref.No.	Part No.	Part Name	Description
	[America Model]			
	1	LC10181-009B-A	PACKING CASE	
	2	LC10365-002A-A	CUSHION ASSY	4pcs in 1set
	3	CP30056-004-A	POLY BAG	
	4	QPA02503505	POLY BAG	
	5	RM-C383-1A	REMOCON UNIT	
⚠	6	LCT0566-001A-A	INST BOOK	[ENGLISH]
	8	CP30055-A02-A	TOP COVER	
	10	LCT0567-001A-A	SETUP GUIDE	[ENGLISH]
	12	BT-51006-1Q	REGISTER CARD	
	[Canada Model]			
	1	LC10181-009B-A	PACKING CASE	
	2	LC10365-002A-A	CUSHION ASSY	4pcs in 1set
	3	CP30056-004-A	POLY BAG	
	4	QPA02503505	POLY BAG	
	5	RM-C383-1A	REMOCON UNIT	
⚠	6	LCT0566-001A-A	INST BOOK	[ENGLISH]
⚠	7	LCT0568-001A-A	INST BOOK	[FRENCH]
	8	CP30055-A02-A	TOP COVER	
	9	LCT0569-001A-A	SETUP GUIDE	[FRENCH]
	10	LCT0567-001A-A	SETUP GUIDE	[ENGLISH]
	11	BT-52004-1Q	WARRANTY CARD	
	13	BT-20071B-Q	SVC CENTER LIST	

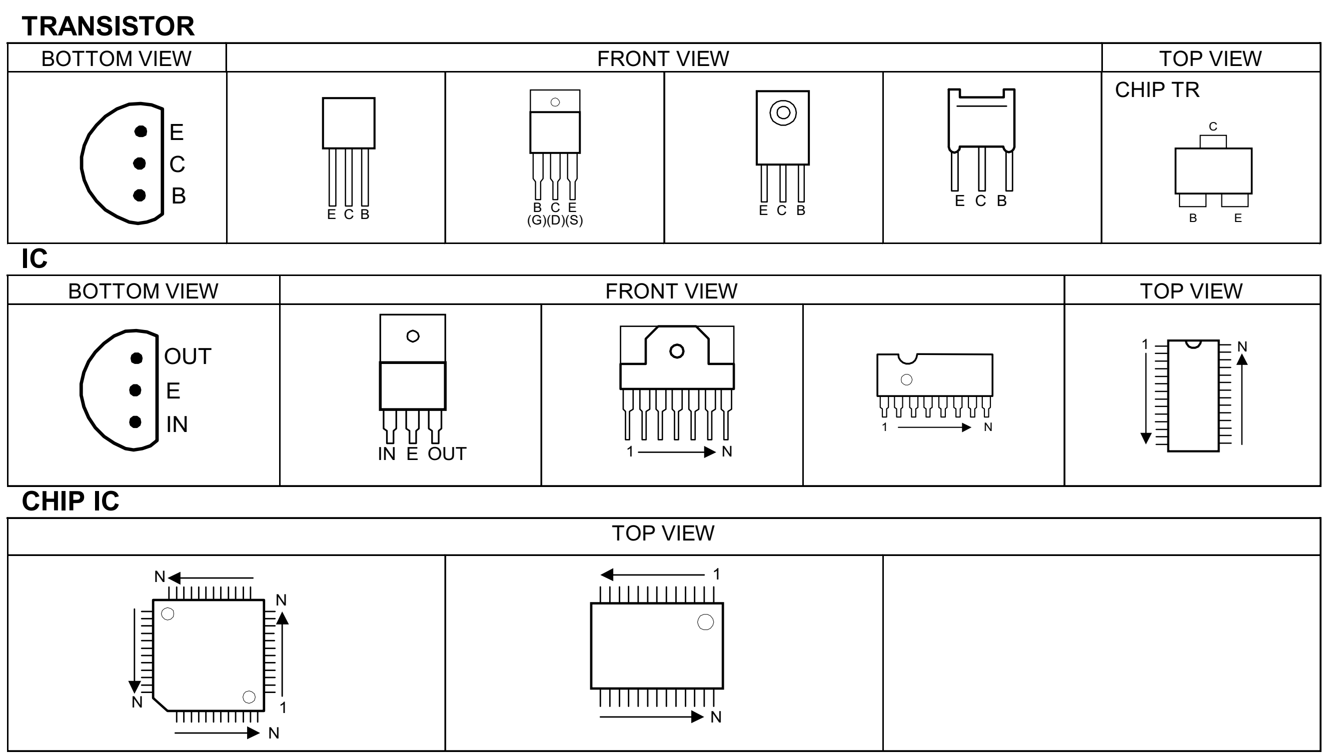
Ⅰ. AV-27D201(US&CA) / Ⅱ. AV-32D201(US&CA) / Ⅲ. AV-32D201(A US & A CA)

REMOTE CONTROL UNIT PARTS LIST (RM-C383-1A)

⚠ Ref.No.	Part No.	Part Name	Description
	~~UR52EC1286A~~	BATTERY COVER	

CONTENTS

SEMICONDUCTOR SHAPES



AV-27D201(US&CA) AV-32D201(US&CA) AV-32D201(A US&A CA) STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the ⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal	: Color bar signal
(2)Setting positions of each knob/button and variable resistor	:Original setting position when shipped
(3)Internal resistance of tester	:DC 20kΩ/V
(4)Oscilloscope sweeping time	:H ⇒ 20μS/div
	:V ⇒ 5mS/div
	:Others ⇒ Sweeping time is specified
(5)Voltage values	:All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

●In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value

No unit	:[Ω]
K	:[KΩ]
M	:[MΩ]

●Rated allowable power

No indication	:1/10 [W]
Others	:As specified

●Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

●Capacitance value

1 or higher	:[pF]
less than 1	:[μF]

●Withstand voltage

No indication	:DC50[V]
AC indicated	:AC withstand voltage [V]
Others	:DC withstand voltage [V]

*Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

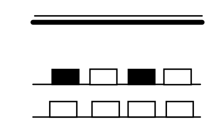
●Type

No indication	:Ceramic capacitor
MY	:Mylar capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

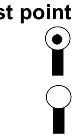
(4)Power Supply



:B1
:9V
:5V

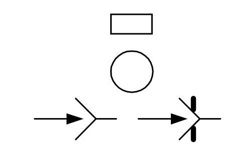
*Respective voltage values are indicated

(5)Test point



:Test point
:Only test point display

(6)Connecting method



:Connector
:Wrapping or soldering
:Receptacle

(7)Ground symbol

⊥ :LIVE side ground
⏚ :ISOLATED(NEUTRAL) side ground
⏚ :EARTH ground
⏚ :DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

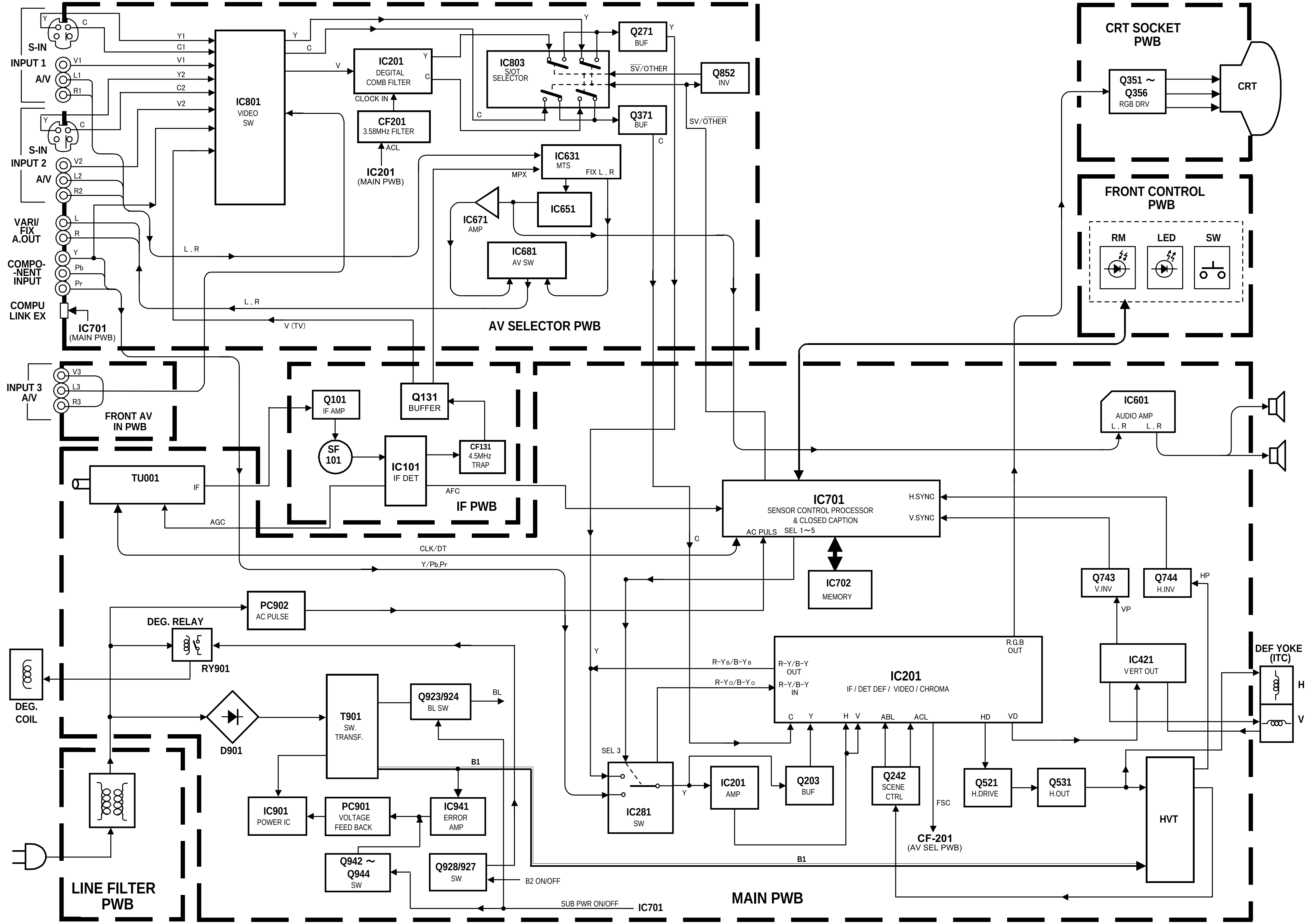
This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

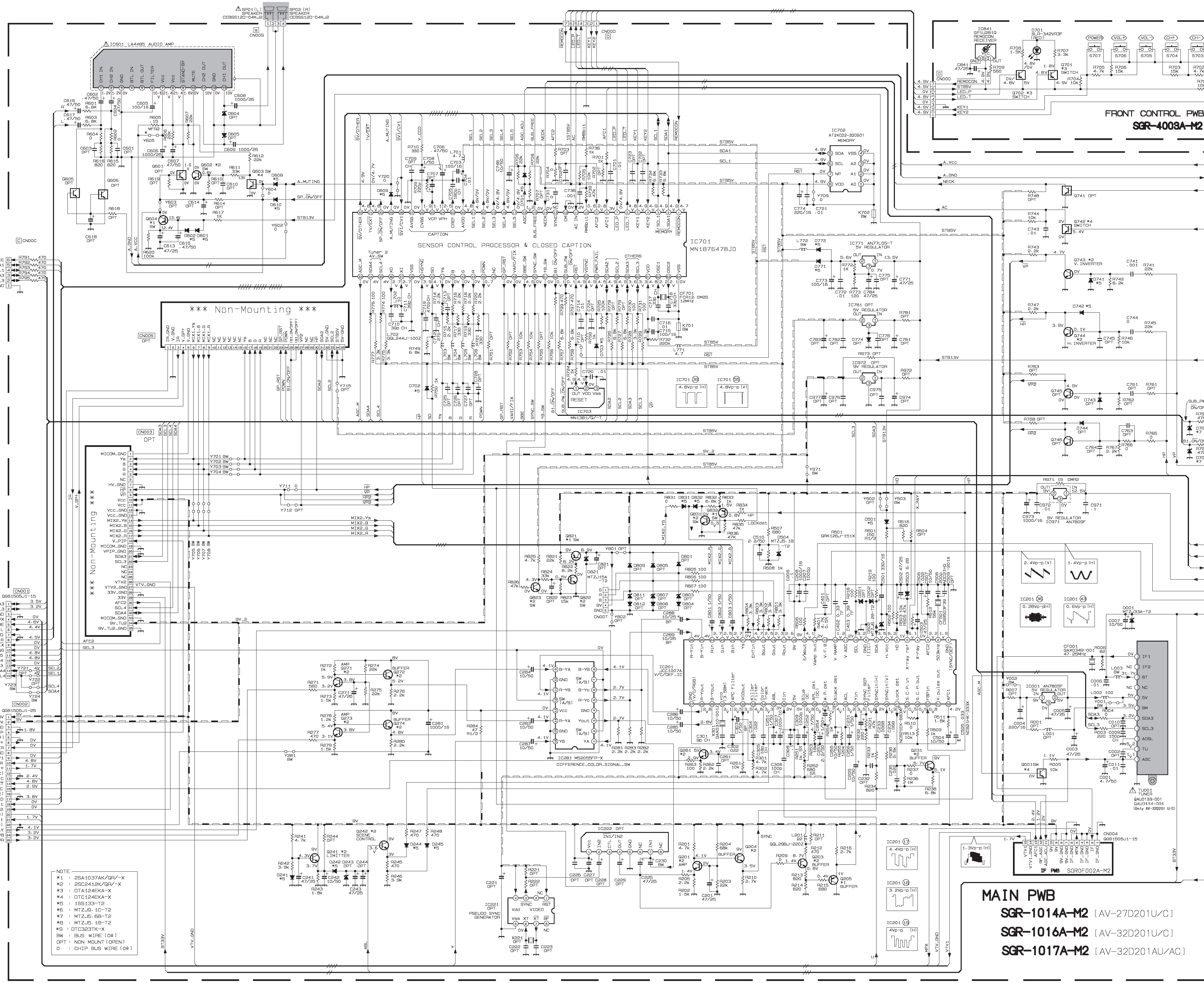
◇Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

BLOCK DIAGRAM [AV-27D201 / AV-32D201 / AV-32D201A]



CIRCUIT DIAGRAMS

[MAIN & FRONT CONTROL PWB CIRCUIT DIAGRAM]



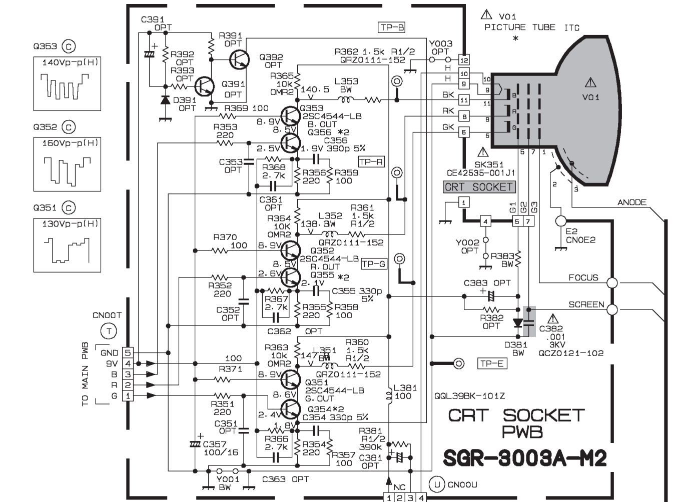
[MAIN & CRT SOCKET & LF PWB CIRCUIT DIAGRAM]

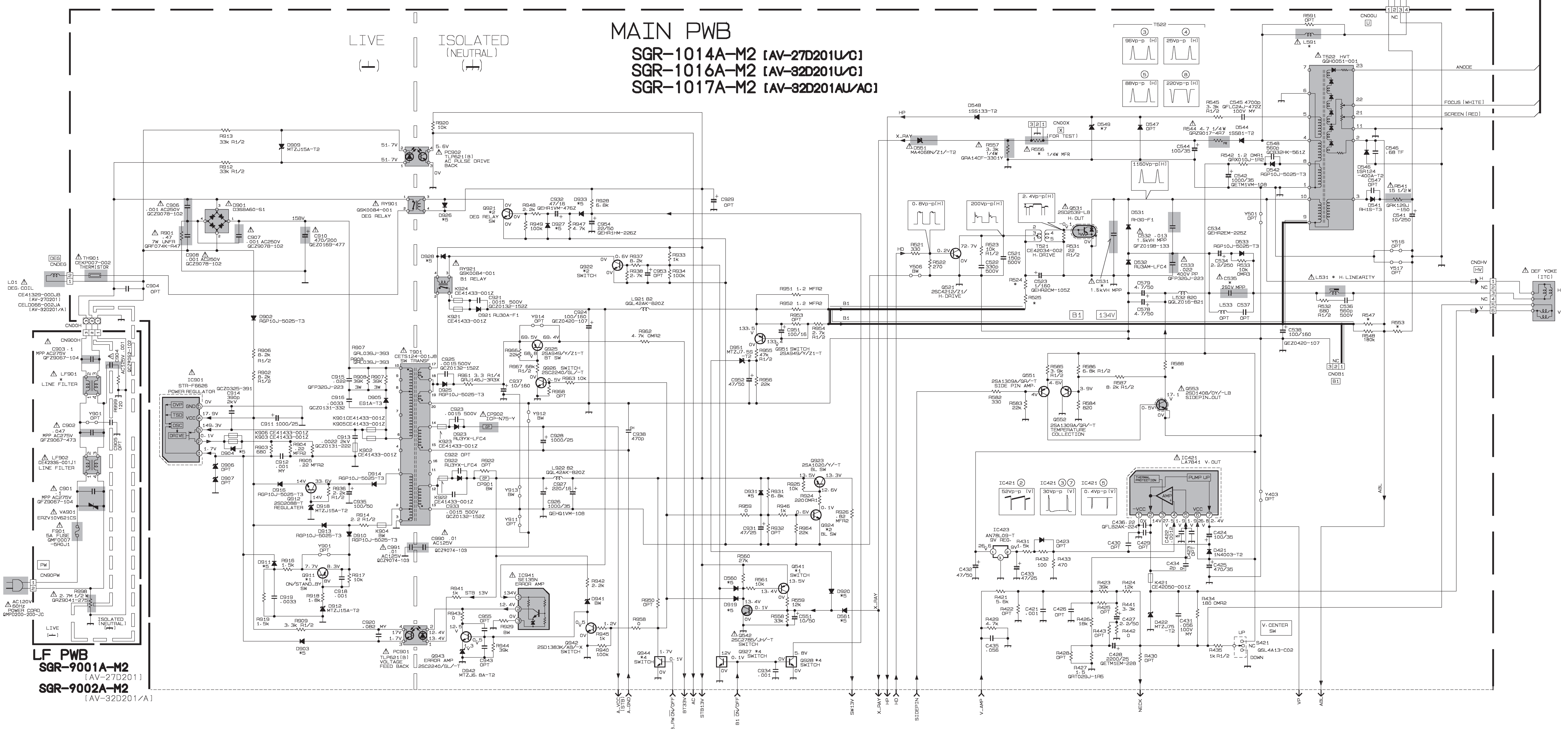
* DIFFERENCE LIST (*PARTS)

	MODEL	AV-27D201	AV-32D201	AV-32D201A
	*	SGR-1014A-M2	SGR-1016A-M2	SGR-1017A-M2
⚠	L531	CE41345-00A	CE41663-00B	CE41663-00B
⚠	L591	QQLZ018-220	QQLZ018-280	QQLZ018-300
	R524	1.8k	1.5k	1.5k
	R525	1.8k	1.5k	1.5k
	R547	180k	150k	150k
	R553	33k	OPT	OPT
⚠	R556	QRA14CF-6341Y 6.34k	QRA14CF-7321Y 7.32k	QRA14CF-7321Y 7.32k
⚠	C531	QFZ0196-472 .0047	QFZ0196-352 .0035	QFZ0196-352 .0035
⚠	C535	QFZ0197-624 .62	QFZ0197-624 .62	QFZ0197-534 .53
	R588	27	27	15
⚠	LF901	CELF008-001J5	CELF001-001J1	CELF001-001J1

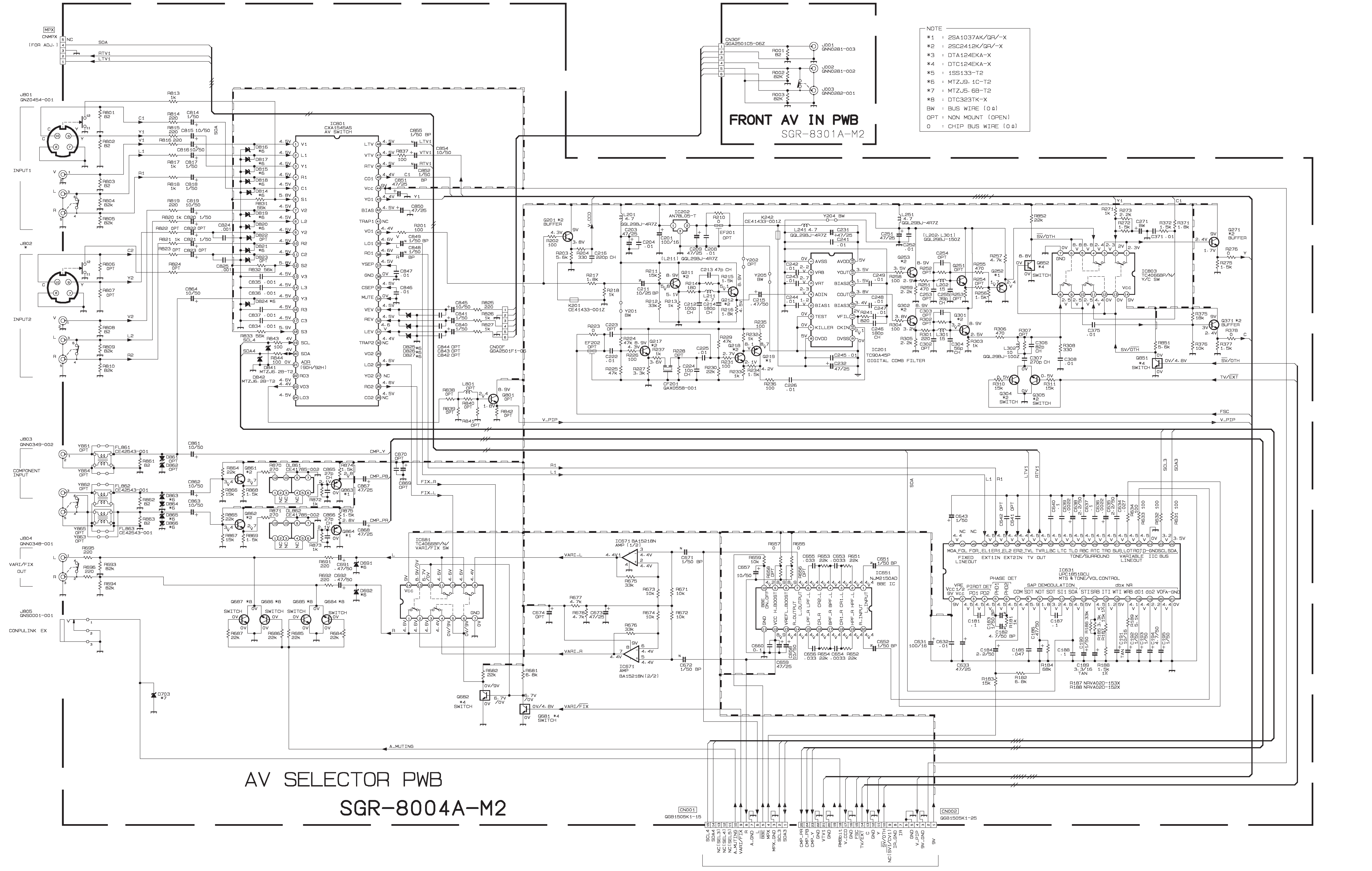
	CRT (V01)
AV-27D201U/C	A68AEG25X01
AV-32D201U/C	A80LJF30X08 (G)
AV-32D201AU/AC	M80JUA061X06

NOTE
- *1 : 2SA1037AK/QR/-X
- *2 : 2SC2412K/QR/-X
- *3 : DTA124EKA-X
- *4 : DTC124EKA-X
- *5 : 1SS133-T2
- *6 : MTZJ9.1C-T2
- *7 : MTZJ5.6B-T2
- BW : BUS WIRE
- OPT : NON MOUNT (OPEN)
- O : CHIP BUS WIRE

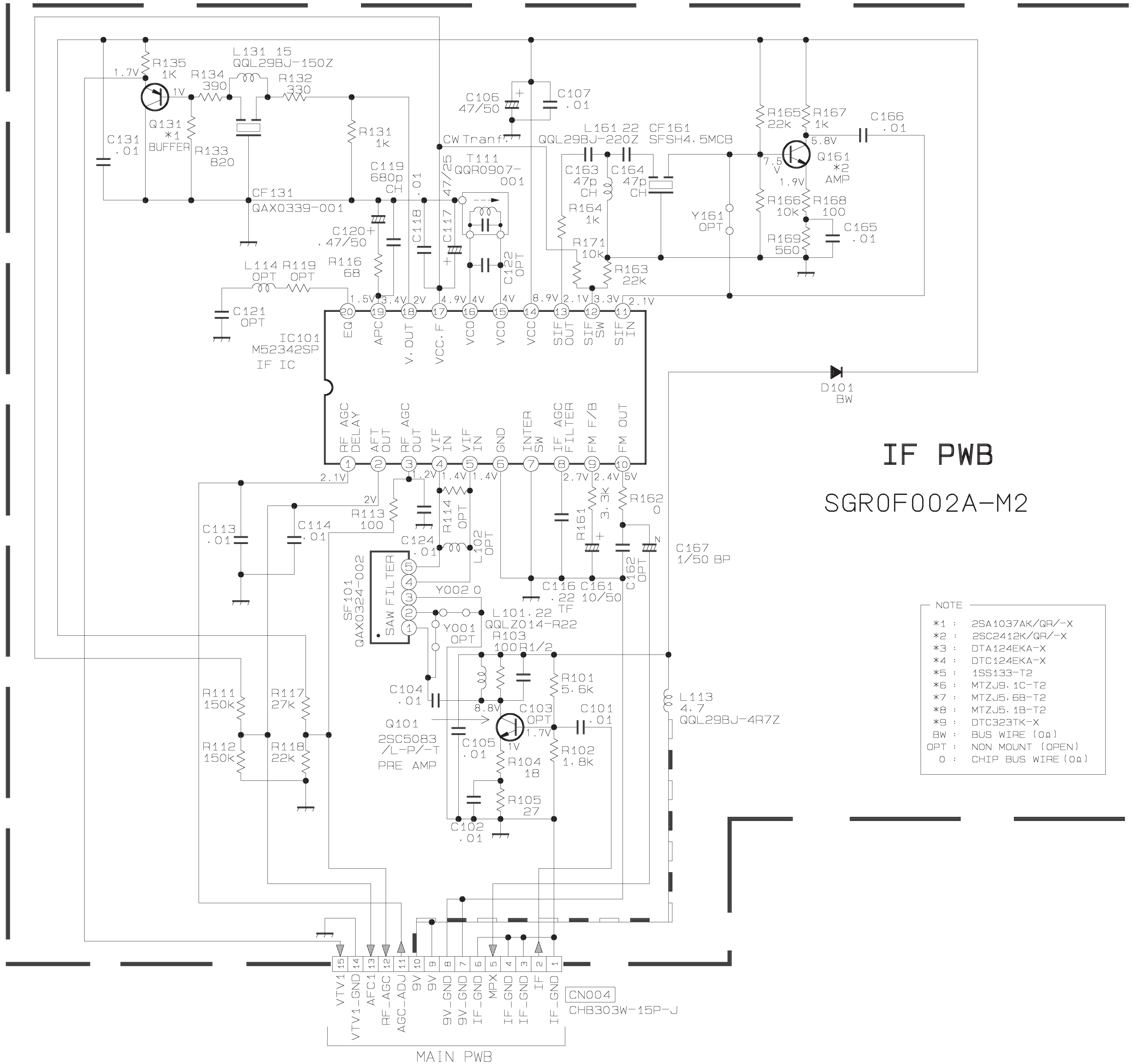




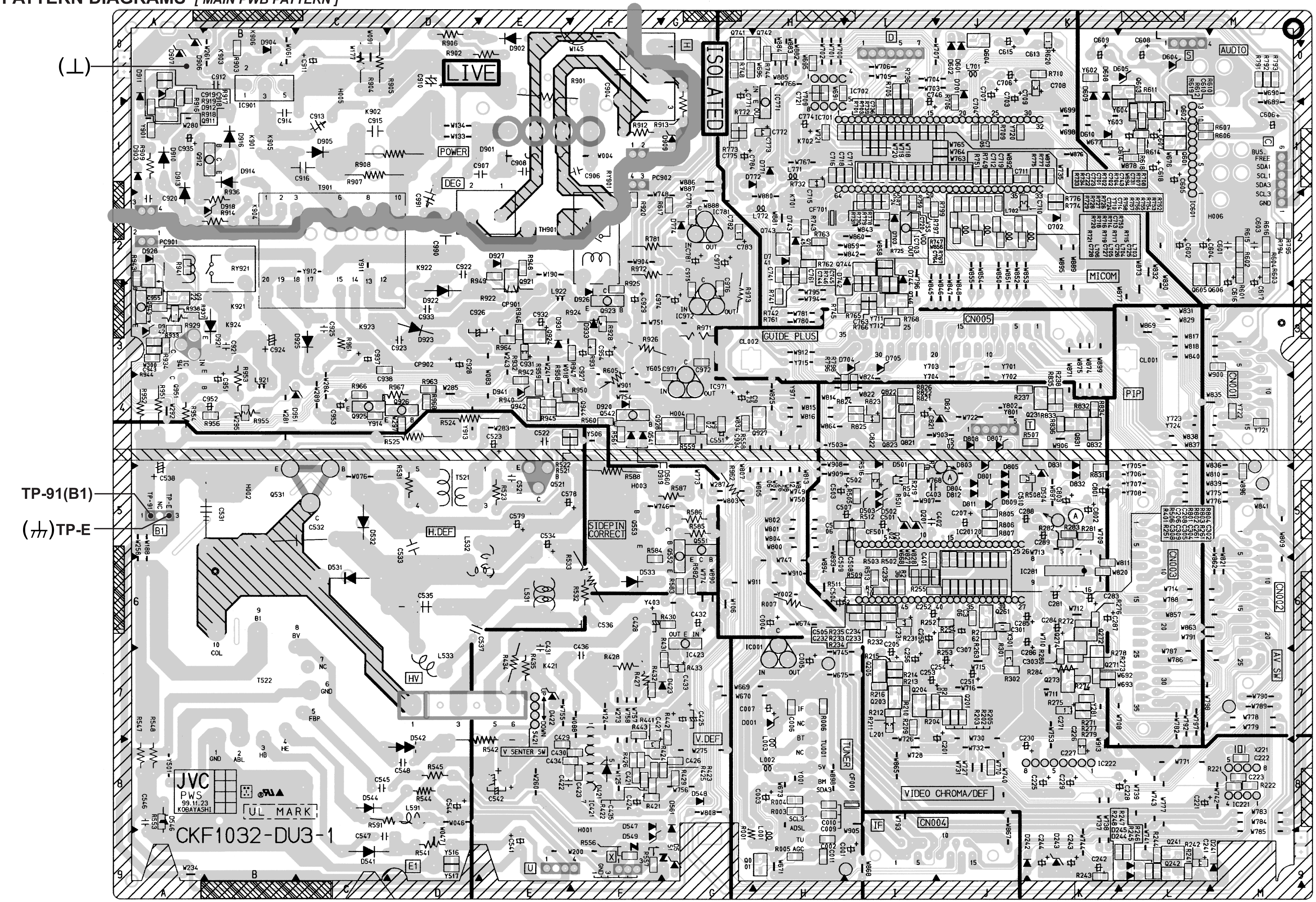
[AV SELECTOR & FRONT AV IN PWB CIRCUIT DIAGRAM]



[IF PWB CIRCUIT DIAGRAM]

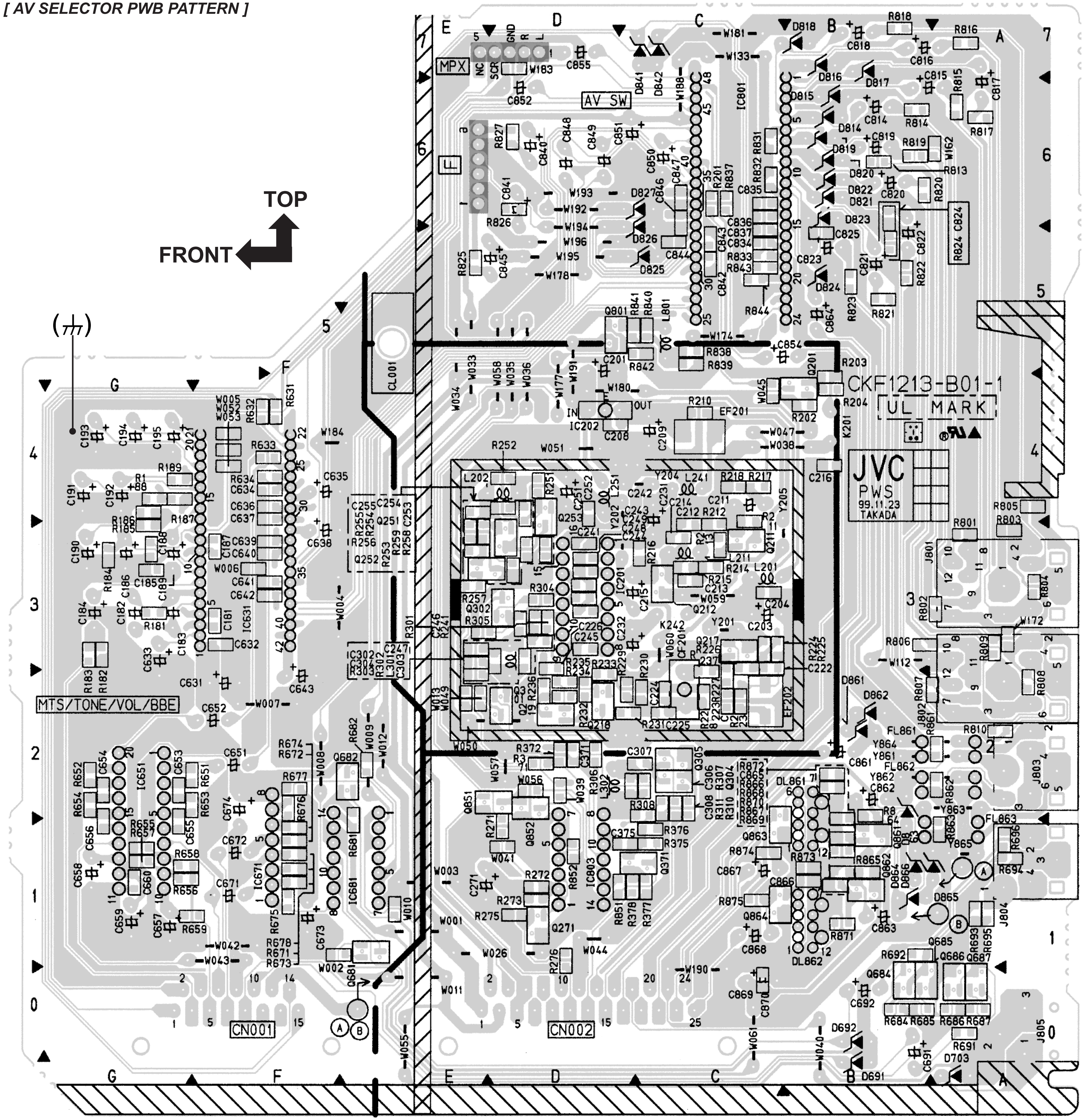


PATTERN DIAGRAMS *[MAIN PWB PATTERN]*

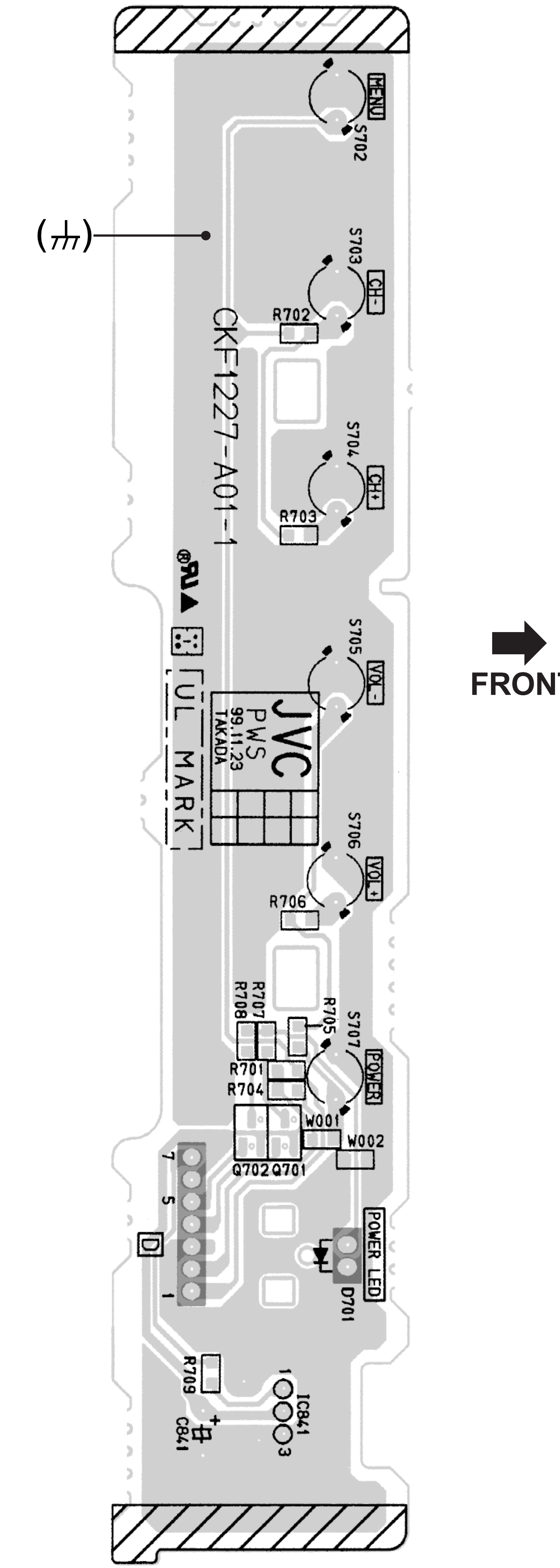


AV-27D201
AV-32D201

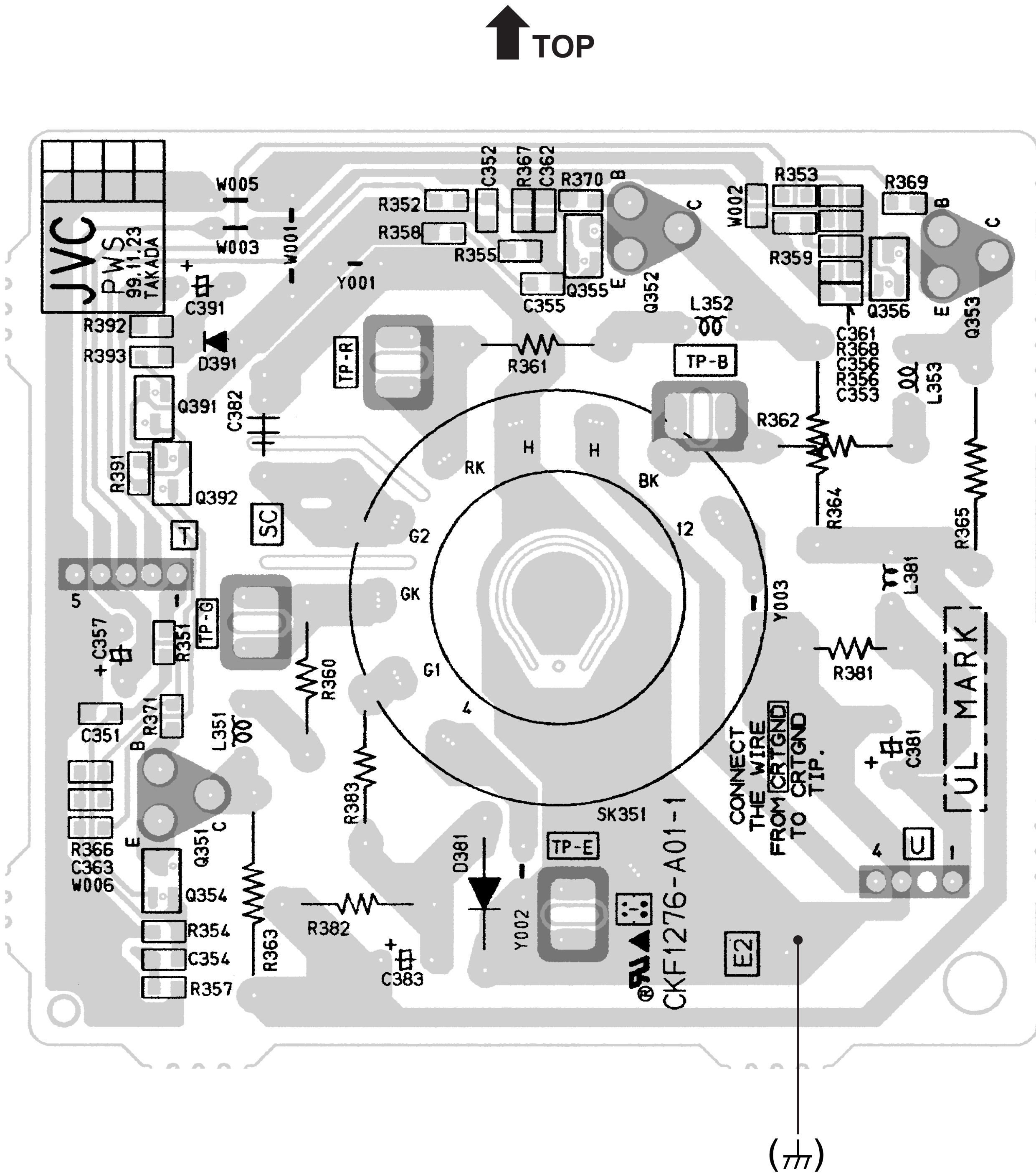
[AV SELECTOR PWB PATTERN]



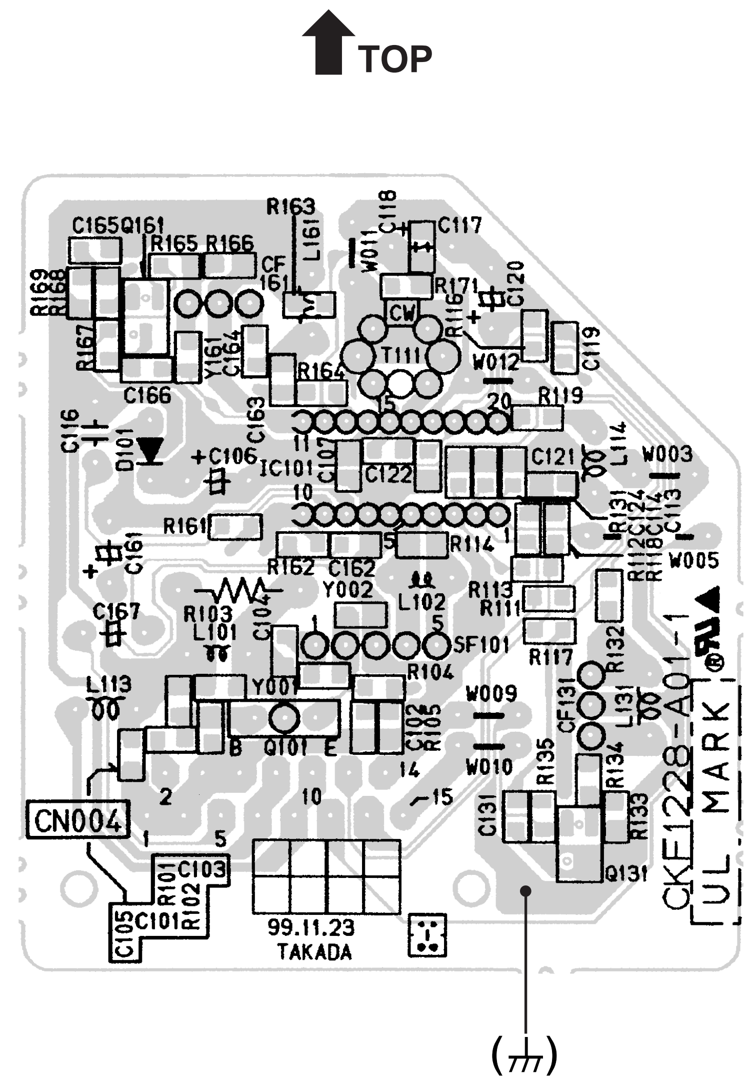
[FRONT CONTROL PWB PATTERN]



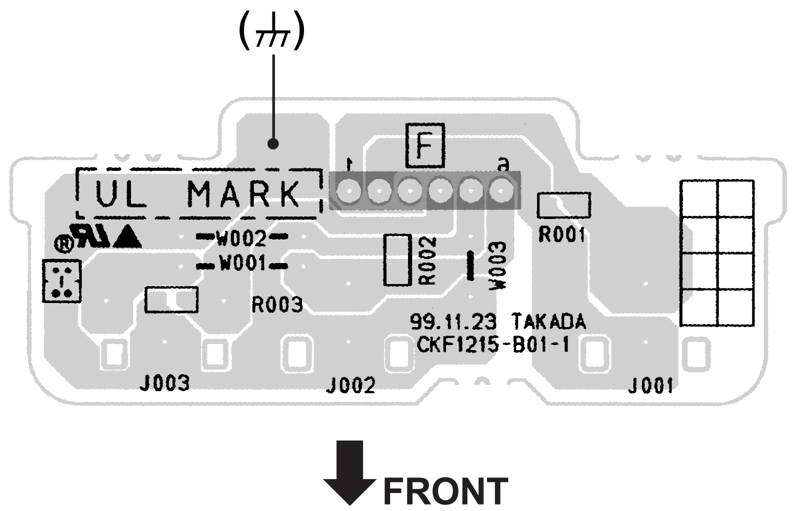
[CRT SOCKET PWB PATTERN]



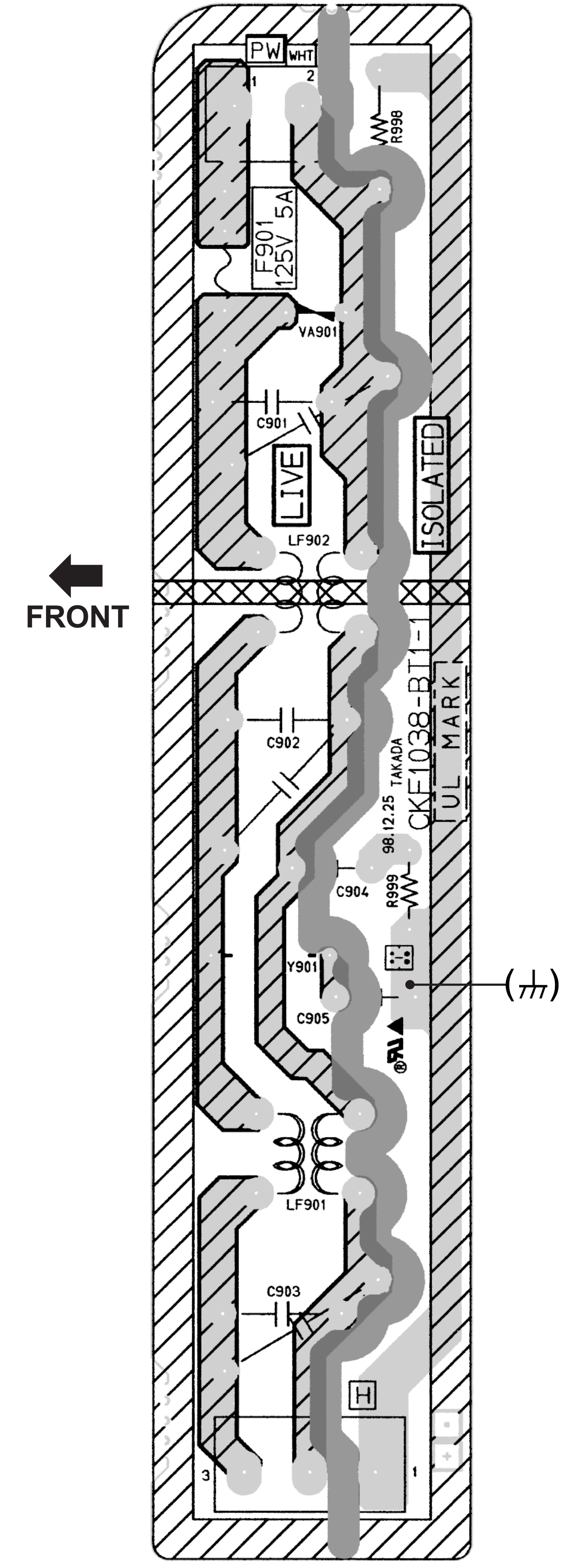
[IF PWB PATTERN]



[FRONT AV IN PWB PATTERN]



[LF PWB PATTERN]



■CHANNEL CHART (US)

MODE TV	MODE CATV	BAND	CHANNEL REAL	CHANNEL DISP.	TUNER BAND
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		II
			08		
			09		
			10		
			11		
			12		
			13		
×	○	MID	A	14	I
			B	15	
			C	16	II
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
		SUPER	J	23	
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	
			Q	30	
			R	31	
			S	32	
			T	33	
			U	34	
			V	35	
			W	36	
		HYPER	W+1	37	
			W+2	38	
			W+3	39	
			W+4	40	
			W+5	41	
			W+6	42	
			W+7	43	
			W+8	44	
			W+9	45	
			W+10	46	
			W+11	47	
			W+12	48	IV
			W+13	49	
			W+14	50	
			W+15	51	
			W+16	52	
			W+17	53	
			W+18	54	
			W+19	55	
			W+20	56	
			W+21	57	
			W+22	58	
			W+23	59	
			W+24	60	
			W+25	61	
			W+26	62	
			W+27	63	
			W+28	64	
		ULTRA	W+29	65	
			W+30	66	
			W+31	67	
			W+32	68	
			W+33	69	
			W+34	70	

MODE TV	MODE CATV	BAND	CHANNEL REAL	CHANNEL DISP.	TUNER BAND
×	○	ULTRA	W+35	71	IV
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
			W+68	109	
			W+69	110	
			W+70	111	
			W+71	112	
			W+72	113	
			W+73	114	
			W+74	115	
			W+75	116	
			W+76	117	
			W+77	118	
			W+78	119	
			W+79	120	
			W+80	121	
			W+81	122	
			W+82	123	
			W+83	124	
			W+84	125	
		SUB MID	A-8	01	I
			A-4	96	
			A-3	97	
			A-2	98	
			A-1	99	
○	×	UHF	14 ∫ 69		IV

TOTAL 180CH
{ VHF 124CH
{ UHF 56CH

NOTE:
TO RECEIVE THE SUBSCRIPTION OR PREMIUM PROGRAMMING FROM CERTAIN CABLE COMPANIES.
SPECIAL ADAPTERS MAY BE REQUIRED.

AV-27D201
AV-32D201

■CHANNEL CHART (CA)

MODE TV	MODE CATV	BAND	CHANNEL REAL	CHANNEL DISP.	TUNER BAND
○	○	VL	02		I
			03		
			04		
			05		
			06		
		VH	07		II
			08		
			09		
			10		
			11		
			12		
			13		
×	○	MID	A	14	
			B	15	
			C	16	
			D	17	
			E	18	
			F	19	
			G	20	
			H	21	
			I	22	
		SUPER	J	23	
			K	24	
			L	25	
			M	26	
			N	27	
			O	28	
			P	29	III
			Q	30	
			R	31	
			S	32	
			T	33	
			U	34	
			V	35	
			W	36	
		HYPER	W+1	37	
			W+2	38	
			W+3	39	
			W+4	40	
			W+5	41	
			W+6	42	
			W+7	43	
			W+8	44	
			W+9	45	
			W+10	46	
			W+11	47	
			W+12	48	
			W+13	49	
			W+14	50	
			W+15	51	
			W+16	52	
			W+17	53	
			W+18	54	
			W+19	55	
			W+20	56	
			W+21	57	
			W+22	58	
			W+23	59	
			W+24	60	
			W+25	61	
			W+26	62	
			W+27	63	
			W+28	64	
		ULTRA	W+29	65	
			W+30	66	IV
			W+31	67	
			W+32	68	
			W+33	69	
			W+34	70	

MODE TV	MODE CATV	BAND	CHANNEL REAL	CHANNEL DISP.	TUNER BAND
×	○	ULTRA	W+35	71	IV
			W+36	72	
			W+37	73	
			W+38	74	
			W+39	75	
			W+40	76	
			W+41	77	
			W+42	78	
			W+43	79	
			W+44	80	
			W+45	81	
			W+46	82	
			W+47	83	
			W+48	84	
			W+49	85	
			W+50	86	
			W+51	87	
			W+52	88	
			W+53	89	
			W+54	90	
			W+55	91	
			W+56	92	
			W+57	93	
			W+58	94	
			W+59	100	
			W+60	101	
			W+61	102	
			W+62	103	
			W+63	104	
			W+64	105	
			W+65	106	
			W+66	107	
			W+67	108	
			W+68	109	
			W+69	110	
			W+70	111	
			W+71	112	
			W+72	113	
			W+73	114	
			W+74	115	
			W+75	116	
			W+76	117	
			W+77	118	
			W+78	119	
			W+79	120	
			W+80	121	
			W+81	122	
			W+82	123	
			W+83	124	
			W+84	125	
		SUB MID	A-8	01	I
			A-4	96	
			A-3	97	II
			A-2	98	
			A-1	99	
○	×	UHF	14 ∫ 69		IV

TOTAL 180CH
{ VHF 124CH
{ UHF 56CH

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